



BITS Pilani
Pilani Campus

RECRUITMENT PROCESS AND INTERVIEW EXPERIENCE

Interviewee Testimonials

Placement Season
2017-2018



Table of Contents

Sector – Mechanical Engineering.....

Company: Bajaj Auto Ltd.....

Profile: Graduate Trainee Engineer

Student: Aniket Ajay Lad (2014A4PS366P)

Student: Abhinav Gupta (2014A4PS343P)

Sector – IT

Company: Uber.....

Profile: Software Engineer

Student: Akul Sareen (2013B4A7743P)

Sector – IT

Company: Goldman Sachs

Profile: Strats Analyst

Student: Sanjog Yadav (2014A7PS041P)

Student: Gaurang Bansal (2014A7PS128P)

Student: Chirag Agarwal (2014A7PS033P)

Student: Sagnik Majumder (2014A8PS464P)

Student: Ayush Sawarni (2014A3PS253P)

Sector – IT

Company: D.E. Shaw & Co.

Profile: Member Technical Staff

Student: Lakshit Bhutani (2014A7PS095P)

Student: Mayank Agarwal (2014A7PS111P)

Student: Arjun Dabra (2013B4A7716P)



Sector – IT

Company: Oracle

Profile: Applications Engineer - Applications Development Group

Student: Sanjog Yadav (2014A7PS041P)

Student: Gaurang Bansal (2014A7PS128P)

Student: Chirag Agarwal (2014A7PS033P)

Student: Sagnik Majumder (2014A8PS464P)

Student: Sanjog Yadav (2014A7PS041P)

Student: Gaurang Bansal (2014A7PS128P)

Student: Chirag Agarwal (2014A7PS033P)

Student: Sagnik Majumder (2014A8PS464P)

Sector – IT

Company: Oracle

Profile: Software Developer (MTS-Server Technologies)

Student: Sanjog Yadav (2014A7PS041P)

Student: Gaurang Bansal (2014A7PS128P)

Student: Chirag Agarwal (2014A7PS033P)

Student: Sagnik Majumder (2014A8PS464P)

Student: Sanjog Yadav (2014A7PS041P)

Student: Gaurang Bansal (2014A7PS128P)

Student: Chirag Agarwal (2014A7PS033P)

Sector – IT

Company: AppDynamics

Profile: Software Engineer

Student: Hiresht Gupta (2014A7PS163P)

Sector – IT



Company: Microsoft IDC
Profile: Machine Learning Research
Student: Shavak Agrawal (2014A7PS076P)

Sector – IT

Company: Microsoft IDC
Profile: Machine Learning Research
Student: Shavak Agrawal (2014A7PS076P)

Student: Sanjog Yadav (2014A7PS041P)

Student: Gaurang Bansal (2014A7PS128P)

Student: Chirag Agarwal (2014A7PS033P)

Student: Sagnik Majumder (2014A8PS464P)

Student: Sanjog Yadav (2014A7PS041P)

Student: Gaurang Bansal (2014A7PS128P)

Student: Chirag Agarwal (2014A7PS033P)

Sector – IT

Company: Amazon

Profile: Machine Learning Research

Student: Shavak Agrawal (2014A7PS076P)

Student: Sanjog Yadav (2014A7PS041P)

Student: Gaurang Bansal (2014A7PS128P)

Student: Chirag Agarwal (2014A7PS033P)

Student: Sagnik Majumder (2014A8PS464P)

Sector – IT

Company: Myntra

Profile: Machine Learning Research



Student: Shavak Agrawal (2014A7PS076P)

Student: Sanjog Yadav (2014A7PS041P)

Student: Gaurang Bansal (2014A7PS128P)

Student: Chirag Agarwal (2014A7PS033P)

Student: Sagnik Majumder (2014A8PS464P)

Sector – IT

Company: Directi

Profile: Machine Learning Research

Student: Shavak Agrawal (2014A7PS076P)

Student: Sanjog Yadav (2014A7PS041P)

Sector – IT

Company: Samsung

Profile: Machine Learning Research

Student: Shavak Agrawal (2014A7PS076P)

Student: Sanjog Yadav (2014A7PS041P)

Student: Gaurang Bansal (2014A7PS128P)

Student: Chirag Agarwal (2014A7PS033P)

Student: Sagnik Majumder (2014A8PS464P)

Sector – IT

Company: Nutanix

Profile: Machine Learning Research

Student: Shavak Agrawal (2014A7PS076P)

Student: Sanjog Yadav (2014A7PS041P)



Sector: Mechanical

Name: Aniket Ajay Lad (2014A4PS366P)

Company: Bajaj Auto Ltd.

Profile: Graduate Trainee Engineer

Recruitment Procedure:

- 1. Online Test:** Verbal, Aptitude, Quantitative (with more weightage for quant and aptitude skills (50%) and Technical (50%). For the technical part theoretical knowledge in IC Engines, Mechanics of Solids, Machine Design and Production Techniques is tested.
- 2. Technical Interview:** Subjects of interest are asked in the beginning. Key focus of the questions was Mechanics of Solids and Production Techniques. Some questions regarding the project and technical team work were asked.
- 3. HR Interview:** Instead of asking series of questions, the interviewer asked about the most stressful situation that I faced and the discussion continued about that. His expectations were to know what was the situation, what caused it and how did I cope with it. Objective of the interview was to study my personality and behaviour.

Sources of Preparation: For aptitude and the technical test one useful source is:

<https://www.indiabix.com>

Courses and Certification: No requirement as such. Automotive engineering would be helpful.

Other Relevant Information:

Have some knowledge about the company like its product portfolio and mission and vision. Be attentive during the PPT as it might be helpful while framing some of the answers.



Sector: Mechanical

Name: Abhinav Gupta (2014A4PS343P)

Company: Bajaj Auto Ltd.

Profile: Graduate Trainee Engineer

Recruitment Procedure

- Online test and Personal Interviews.
- Test had four sections- Verbal, Logical Reasoning, Quantitative Aptitude and Technical with former three constituting 50% of the questions.
- Test was good. Aptitude questions were relatively similar. Technical questions tested the strength and grip of fundamentals. Speed is critical to fare well as you have only a minute per question.
- There might be one or two round of technical interviews. There was no separate HR interview, although some questions were asked during the technical interviews only.
- Interview started with your introduction and interests.
- It was then followed up by questions from IC engines, Mechanics of solids, Machine design and Production techniques with a few questions from Engineering graphics, High school mathematics and other areas. The questions were pretty simple and tested only the fundamental knowledge of the subjects.
- The last question was 'Why BAJAJ?'

Sources of Preparation

- Revision of basic core concepts and fundamentals is necessary for the test. Online tests and mechanical engineering interview questions can be a good source for last day revision.
- IC engines, Mechanics of solids, Machine design and Production techniques were the main focus of interviewers. Clarity of basic concepts is expected so revise accordingly.

Courses and Certification



There requirements are fulfilled by the CDC's only. Electives might just be a bonus for preparation. They are looking for relevant knowledge base regardless of its source.

Other Relevant Information

It pays to be honest during interviews. With questions being really basic, you have no room to fool around. So politely accept if you do not know the right answer and make only intelligent and logical guesses. However, do try to recall the answer as sincerely as you can. Also, be confident in answering the questions you understand really well. Confidence and responsiveness is appreciated by the interviewers.

Sector: IT

Name: Akul Sareen (2013B4A7743P)

Company: Uber

Profile: Software Engineer

Recruitment Procedure

- Online coding round, 3 Interviews
- Coding test had 3 questions and lasted 1.5 hours:
 1. Given an array of size up to 10^5 count the number of contiguous subarrays it has such that a subarray contains at least 1 odd number
 2. Greedy problem
 3. Variant of Travelling Salesman Problem
- Interview 1 had 2 questions (code had to be written on paper for both of them):
 1. Easy strings problem
 2. Checking if point lies in polygon
- Interview 2 had 2 questions (code had to be written on paper for both of them):
 1. Cloning a linked list with next and random pointers in $O(1)$ extra space
 2. Merging n sorted arrays of strings into 1 sorted array of strings
- Interview 3 was conducted over Skype. The interviewer has no pre-planned questions and asks questions based on your answers to earlier questions.

Sources of Preparation

My preparation was mostly done indirectly by participating in programming contests. Common problems from common topics in DSA should be prepared, I suppose.

Courses and Certification

N.A.

Other Relevant Information



N.A.

Sector: IT

Name: Sanjog Yadav (2014A7PS041P)

Company: Goldman Sachs

Profile: Strats Analyst

Recruitment Procedure

Online Round:- The online round comprised of 5 mcqs and two coding questions. The mcqs were based on basic data structures and algorithms but a little conceptual. Marking scheme +10/-3.

Coding Question 1: - Given a string comprising of various words separated by various delimiters find the first repeating word (Case sensitive search). Marking Scheme – 15 marks (partial marks for each test case).

Coding Question 2:- Given some initial number of red, green and blue socks (≥ 0 and even in count). Assuming we are only allowed to pick one sock at a time, what is the maximum number of steps to get 'k' pairs. Marking Scheme – 35 marks (partial marks for each test case).

Getting mcqs right were a deciding factor to get a call for an interview because the questions were done by many people.

20 students were shortlisted after the online round.

Interview Rounds were conducted in no particular order of the topics. For example, the first guy could go into algorithms or he could go into electives and projects.

Interview Round 1:- The first interviewer came straight to my projects and asked me to choose a project which I was confident in. I chose a project involving data analysis and prediction models. He asked various questions regarding the approach I was following and also presented some tweaks in the project of his own. Then he went to algorithms and ds,



First question was trivial, Given an array find the number of subarrays with sum equal to zero.

Second question was common but with a little challenging optimization. Given a large number n and only allowed operations as making it $n-1$ or $n/2$ or $n/3$, find the minimum number of operations to make it equal to 1. $O(n)$ is pretty trivial. But he straight away told me to solve it in $O(1)$ time.

Then he asked me if I had any questions and I asked him some.

Interview Round 2:- The second interviewer first asked me some basic questions on databases and then jumped onto algorithms again.

First question was a modification of range minimum query and I proposed an approach using segment tree. Then he told me to explain how segment tree works and its applications.

Second question was on Euler Tour. He first asked what an euler tour of a tree is and asked me write a code to find the same for a general tree. The solution was basic dfs.

Third question was not on algorithms as such and wanted to see how I observe and handle edge cases in a problem. Given to Date Objects (year, month, date) find the number of days between them. He asked to write the complete pseudo code and expected me to handle every possible edge case like a leap year (No it's not checked by dividing by 4 in case you are wondering :p) and was also observing how I broke the problem in various functions to eliminate code redundancy.

Fourth Question was a puzzle, Given an array of size 10 where value at each index indicates the number of times this index is occurring in the array. Find the elements of the array.

Then he asked me if I had any questions. Don't ask questions just for the sake of asking and repeat same questions to all interviewers. They share their feedback with each other.

Interview Round 3:- Some basic technical questions were asked in the beginning. We discussed about the past internships I had.

After that he started presenting me with some real life situations and how I would handle them. Answer everything carefully as this is the round which shook me the most. The questions are somewhat linked with each other and It can be a downside if you contradict yourself at any point. Then he explained the various roles people have at Goldman Sachs. This was predominantly an interactive session.

Interview Round 4:- This round had the System Design Problem. Very helpful if you have seen one before.

He asked me to design a bus reservation platform like Redbus. He started with basic specifications and added complicated features on the go. I had to manage every information in efficient data structures so as to answer



every query presented by the application efficiently. Graphs ,bitmasks,hashing were some of the areas I went into while designing the system. This problem took about 20 mins to solve.

After these rounds were done, there was an interactive session with a panel guy and we discussed about the areas in GS (he explained before.) I was interested in.

We were finally done for the day.

Sources of Preparation

www.interviewbit.com

www.geeksforgeeks.com

The above mentioned platforms should be done thoroughly. This is more than enough but giving contests on codeforces and other CP sites is an added advantage as you will get a feel of competing with a timer on your head.

Courses and Certification

Data Structures and Algorithms is an absolute must. Databases and machine learning are a plus.

Other Relevant Information

They started analysing you from various perspectives before you even know it. So be smart and try to be yourself throughout the interview.



Sector: IT

Name: Gaurang Bansal (2014A7PS128P)

Company: Goldman Sachs

Profile: Strat Analyst

Recruitment Procedure

- Online Test, Interview Rounds
- Online Test had 2 sections (75 min):
 - a. Multiple choice Questions (5)[+10 /-3]
 - b. 2 Coding Questions(35 + 15)
- Test was easy and one had sufficient time to complete the problem if one could crack the logic to solve it. During Interview you must know what approach and what answer you gave in test and why. They have a copy of your test.
- Interview I:
 - a. Are you nervous? Have you ever had bad interview experience?
 - b. Given a natural number n , what is the least number of moves you need to reduce it to 11? Valid moves are:
 1. subtract 1



2. divide by 2
3. divide by 3

Give the approach first and the program.

- c. Given an array, print all sub arrays in the array which has sum 0.
- d. Any Questions for me?

- Interview II:

- a. Tell us about yourself?
- b. Programming question from online Test. What other approaches can be applied to solve the same problem given if you can use extra memory? if a dark contains a red socks, b blue socks, and c white socks, how many must you pull out to have exactly N pair?(Find Maximum Number, given a,b,c are even)
- c. Snake and Ladder Problem. Given a snake and ladder board, find the minimum number of dice throws required to reach the destination or last cell from source or 1st cell. Basically, the player has total control over outcome of dice throw and wants to find out minimum number of throws required to reach last cell?. Tell first the approach, time complexity and then write code
- d. N Queens Problem. The N Queen is the problem of placing N chess queens on an $N \times N$ chessboard so that no two queens attack each other
- e. What do you know about Goldman Sachs? Why Goldman Sachs ?
- f. Do you find yourself capable enough of working in Goldman Sachs?

- Interview III:

- a. Tell us about yourself?
- b. What would you do if in group you are only the person who putting all effort on the project?
- c. What do you know about Goldman Sachs? Why Goldman Sachs ?
- d. If choice is given to select from all the companies you have taken test which company would you prefer and why?
- e. What work would you like to do in the company? Say that job profile is not available, then?
- f. Any Questions for me?

- Must be familiar with Data Structure and Algorithms, have strong grasp over different approaches to solve the problem. You can practice dynamic programming and backtracking problems.

Sources of Preparation

Geeks for geeks and Interview Bit are good links for practicing sufficient problems.



Courses and Certification

Must have good grasp over either Algorithms Design, Dynamic Programming, Back Tracking or Machine Learning if that is your domain.

Other Relevant Information

You need to be able to convince the recruiter why you wish to join that particular organization and not work in some other firm. Why you are the best option for them.

Sector: IT

Name: Chirag Agarwal (2014A7PS033P)

Company: Goldman Sachs

Profile: Strat Analysts

Recruitment Procedure

- Resume Shortlisting, Online Test, 3 rounds of technical interviews, HR interview.
- Test was easy. 2 coding questions-15 marks+35 marks. 5 MCQ questions(+10,-3). MCQ questions were mainly based on Data Structures and Algorithms and were slightly tricky.
- Technical Round 1- Mainly algo questions. Have to answer quickly, interviewer won't wait for long and move on to the next question. Most of them were standard questions.
- Technical Round 2- Asked me my interest. I said Parallel Computing. I was asked about Distributed Systems and Map Reduce. Then he went on to ask some standard Database and Algorithm questions.
- Technical Round 3- Mainly the interviewer wanted me to explain all the projects that I had done in detail. He questioned me on why I had done things a certain way and why couldn't they be done the way he was proposing.



- HR Round- Questions like-“Would you prefer working in a team or individually”, “How would you handle the situation when 2 members of your team fall sick”were asked. Didn’t have to think really hard.

Sources of Preparation

If you have done Competitive Programming, then Algo questions in any round won’t trouble you. If you have not, please ensure you learn at least how to write brute force solutions and some standard Dynamic Programming solutions.(Try codeforces Div2 first,second and third questions). Geeksfor Geeks also has some of these.

Be thorough with your resume. You should be aware of every word written in it.

Course Subjects one should remember-

1. Operating Systems
2. DBMS
- 3.OOP
- 4.Computer Networking

All these are a must. Anything extra would be a bonus. Also try studying design questions from InterviewBit. Could prove to be helpful.

Not much preparation is required for the HR round. Just speak your heart out. At the same time ensure you are politically correct.

Courses and Certification

Prob stats could prove to be useful. I was asked simple questions. They could have asked tougher ones.

Other Relevant Information

Communication skills also play an important part in the interviews. Always try to look calm and composed even if you may be ready to collapse under pressure anytime.



Sector: IT

Name: Sagnik Majumder (2014A8PS464P)

Company: Goldman Sachs

Profile: Strat Analyst

Recruitment Procedure

● Online Test (5 MCQs related to Aptitude, Data Structures and Algorithms; 2 coding questions)

● Interview Questions -

1. 3 Technical Rounds:

i. Round 1 - 2 questions on Algos (DP) and 1 on DAG, 1 basic question on OOP (abstract class), 1 question on multi-threading.

ii. Round 2 - 1 basic coding question, 1 on graph traversal (min. no. of steps in Snake and Ladder game), 1 on string search in web crawler using KMP (string search). A few questions on general aptitude, math and statistics.

iii. Round 3 - Complete ML round. Was asked to implement XOR in neural nets, Questions on RBFN, decision trees, random forests and was also asked some intuitive questions on ConvNets



2. 2 HR rounds:

i. Round 1 - (a) "Tell me about yourself"

(b) "Why do you want to join GS?"

(c) Was given a few real-life situations, was asked how to react in those situations (human resource management).

(d) Was given the option of 2 profiles and was asked my preference.

And if I don't get my preferred profile, will I be able to fit into the other one?

ii. Round 2(very short) - Was asked again about my profile preference and if I would prefer Bangalore or Mumbai though we had the only option getting posted in Bangalore.

Sources of Preparation

1. HackerEarth Codemonk, 2. Interview Bit, 3. Geeks for Geeks, 4. Resources on ML

Courses and Certification

1. OOP, 2. DSA, 3. Neural Networks, 4. Machine Learning

Other Relevant Information

Concentrate on algorithms and ML concepts.

Sector: IT

Name: Lakshit Bhutani (2014A7PS095P)

Company: D.E. Shaw & Co.

Profile: Member Technical Staff

Recruitment Procedure

- **Online [Coding] Round-**

The test had three sections – Coding, Technical and Aptitude. It was hosted on HackerRank.

Coding round had 2 questions – time limit was 50 minutes. The first question was on basic array operations and second was based on linear dynamic programming.

Technical round had 10 questions – time limit was 20 minutes. It was based on data structures, operating systems, databases, object oriented programming and computer networks.

Aptitude round had 10 questions – time limit was 20 minutes. These were basic quant questions and some information based puzzles.

- **Technical Round - 1**

Asked few questions about project I did in my internship. Programming questions were – finding diameter of a tree using recursion/iterative/stack and LCA of BST, binary tree and n-ary tree. Entire code had to be written on a



sheet of paper. I was also asked some basic SQL queries, OOP concepts like multiple inheritance in C++, scope resolution, polymorphism etc.

- **Technical Round - 2**

I was asked to come up with different approaches to implement autocorrection of misspelt words. Programming questions were – point(s) of equilibrium when n magnets placed on a line, median of a stream of numbers, minimum knight moves from source to destination on a chess board and k smallest numbers in a stream of numbers. I was also asked a design questions to implement an interface for configuration of server, logging, authentication and database services on a machine. There was some discussion on type of work I will be interested in doing and on the projects I had done in college as well as in my internship.

- **HR Round**

Usual HR stuff like basic introduction, what I like/dislike, my strengths/weaknesses, where I see myself in 5 years, my USP, why should DE Shaw hire me and why did I choose DE Shaw. Other things like what did I learn in my summer internship, why did I reject the PPO, what all companies I sat for before this interview and the companies I will be sitting for today. When I said I will be sitting for Goldman Sachs and Oracle as well, they gave my result immediately!

Sources of Preparation

Geeks for geeks gives you an exhaustive list of problems which are usually tricky and difficult to solve if you don't know the concept. Interview experiences on the same website gives you insight of other selected people. Regular competitive programming experience will give you an upper hand in all companies and not just DE Shaw.

Courses and Certification

These courses are absolute must to know [for all companies in general] -

- Data Structures and Algorithms
- Object Oriented Programming
- Operating Systems
- Database Systems
- Computer Networks



Other Relevant Information

Mostly programming questions are asked from graphs (more specifically trees) and dynamic programming. The stronger these two concepts, the more are your chances to succeed irrespective of the company.

And do revise the courses well as good programmers tend to be differentiated using theory and design.

Sector: IT

Name: Mayank Agarwal (2014A7PS111P)

Company: D.E. Shaw & Co.

Profile: Member Technical Staff

Recruitment Procedure

Round 1: This round was an online round conducted on Hackerrank which consisted of 2 coding questions which needed to be solved in 50 minutes. Apart from this we needed to solve 10 theory questions and 10 aptitude questions in 20 minutes each.

Round 2: (PI) This round started with a discussion on a project from my previous internship. After that I was given to solve two coding questions. He asked me to write the complete working code for one of the problems covering all edge cases. After this I was given an Object Oriented Design problem in which we had to design an appropriate interface. Further, there were a few questions on differences between JAVA, python and c/c++.

Round 3: (PI) This round started by discussion on database. I was given a general database of students in a college. We had to find the redundancy in the database and discuss about 1NF, 2NF, 3NF and BCNF. After this, there were questions on triggers and other database concepts. I was asked to show the internal implementation of semaphores and what role do they play. After this there were a few questions on data structures and algorithms and there were questions on heaps and time complexity of various heap operations.

Round 4: (HR) This was the final round and there were general questions such as why DE Shaw, discussion on JEE rank and previous internship experiences.

Sources of Preparation

- practice.geeksforgeeks.org → Practice questions companywise.



- Interviewbit
- OOP, DBMS, OS, Networks from slides and youtube videos (GATE Lectures)

Other Relevant Information

Sector: IT

Name: Arjun Dabra (2013B4A7716P)

Company: D.E. Shaw & Co.

Profile: Member - Technical

Recruitment Procedure

- C.G.P.A required ≥ 7 .
- Online round on hackerrank contained 3 sections which were given separate time limits.
 1. First section contained 2 algorithmic questions for which you have to write code. Time limit for this section was 50 minutes.
 2. Second section contained 10 Mcq's containing technical questions to check CS courses concepts. Topics covered were networks, data structures, dbms, oop and os. Mostly there were between 1/2/3 questions from each topic. Time limit for this section was 20 minutes.
 3. Third section contained 10 mcq's covering aptitude questions. They were moderate level but required speed as there were calculations involved in every question and last 3 questions were very lengthy. Time for this section was 20 minutes.
 4. One important thing in this test was that time left for previous section was added in next section. So if you can solve algorithmic and technical questions fast then you can save time for aptitude so that you can solve all aptitude questions.
- After online round 19 students were shortlisted for interview rounds.
- In interview there were 2 technical rounds and 1 HR round.
- Technical round 1
 1. Introduce yourself: - My personal advice, while introducing yourself do tell things you are good at and what things you regularly do and topics you like and in which you are confident. Initial part of interview may take a good direction.
 2. Tell some good question that you have solved in some programming contest. (This was because I told them that I participate in programming contest).
 3. Questions asked: -
 - 1) Use of extern keyword.



- 2) Different stages of program execution. Basically his idea was that after telling all stages of program execution(like lexer,parser,semantic analyzer,code generation,linkage) he asked at which stage extern variable resolution is done.
- 3) Given some dependencies like A extern variable depends on B extern variable which depends on some other and so on. Find if resolution of extern variables is possible or not. If possible find the order. First told the algo then was asked to write the code. While writing code i used #define var so asked me what it is and at what stage its resolution is done during program execution.
- 4) Destructor in C++. Virtual constructor in C++.
- 5) Basic oop concepts like inheritance,run time polymorphism.
- 6) 2 algorithmic questions.(one was easy and one was moderate).
- 7) Discussion about project in intern.(It involved DBMS).
- 8) Asked to write 2 sql queries. (One question was based on using group by clause and count function) (other question was based on max function and using subqueries) (there may be other ways to write queries).
- 9) One puzzle question.

Answered correctly everything. 1/2 things I told them I don't know.

- Technical Round 2

1. Design bits pilani database.(e.g make tables like students, courses etc. by making ER diagram). After designing some sql queries were asked on same design.
2. Some questions related to fork(). Parent process, Child process. Kill command in unix. (this was because my resume contained project related to this).
3. Questions related to input,output stream in C++. How do you think they are implemented.
4. Questions related to method overloading, method overriding.
5. Again asked about virtual keyword in C++.
6. What is copy constructor? Whether it is there in C++/Java?
7. 1 Algorithmic question.

Answered everything correctly.

- HR round

1. Introduce yourself.
2. 2 puzzle questions asked. He gave hints we solved together.
3. Why do you want to join company?
4. Why should we hire you?
5. Any questions you want to ask?

Sources of Preparation

- For programming you can prepare from judges like hackerrank, codeforces, geeksforgeeks etc.



- For courses I advise you to study from your course slides and just have a look at topics from geeksforgeeks for some topic which is asked and not there in your slides. Mostly questions asked are from your course curriculum.
- Study topics like OS,DBMS,OOP,Networks,Compiler.
- You can look at some puzzles also. Generally if they ask they give hints in solving them. In puzzles they just need to see how you approach.

Courses and Certification

Courses knowledge that were required were mostly CDC's.(OS,DBMS,OOP,NETWORKS,COMPILER).

Other Relevant Information

- Focus on algorithmic questions as they are required for getting you shortlisted. As if you are not shortlisted then it doesn't matter which topic you are good in.
- If algorithmic questions done revise your concepts related to your CDC's.
- Do prepare your resume.



Sector: IT

Name: Akshay R (2013B3A7543P)

Company: Oracle

Profile: Applications Engineer - Applications Development Group

Recruitment Procedure

- Two tests, Four rounds of interview
- First test had several sections – Verbal aptitude, Numerical reasoning, Logical reasoning, Software Engineering test, Coding skills test. All of these were MCQ's.
- Second test was coding test – two questions
- First interview round was a puzzle and a code on paper question.
- Second involved references to the resume, explaining the different projects. There were some database management questions, SQL queries. The logic and your approach more important than the syntax etc. And then more puzzles – three more.
- Third interview was Manager round. Again, explaining points on the resume, questions on OS, DBMS
- Fourth round was HR – Tell me about yourself, Why do you think you're fit for this role, What is your understanding of this role. Typical questions.

Sources of Preparation

GeeksforGeeks – for everything, from puzzles to coding.

Courses and Certification

DBMS is a definite favourite, many questions. Apart from this, OOP, OS and DSA are important.



Other Relevant Information

A lot boils down to how you think and approach problems and questions, as far as the interviews are concerned. Be vocal about your thinking process. Don't stare blank. Tests are easy, keep in mind the ticking timer. These interviews can be very fun! Be sure to enjoy them.

Sector: IT

Name: Harsh Sinha (2013B2A3838P)

Company: Oracle

Profile: Applications Development Group

Recruitment Procedure

- Online Test
 - Sections :
 - English Grammar and Comprehension : Replace Words with similar meaning, correct grammar usage, passage comprehension
 - General Aptitude: Questions related to percentage, ratio, speed of crossing trains etc.
 - Data Analysis: Analyze data provided and answer which of the options is correct
 - Programming: Analyze flow charts and assign code chunks to different blocks
 - Core CS: DBMS, OOP, Java, C/C++, OS
 - All questions were MCQs. Test was easy. However, it is important to maintain speed to finish all questions. Each section was divided into further sections. Going back to previous questions was not allowed. Every section and subsection was timed.
- Interview
 - Round 1
 - Tell us about yourself, General puzzle questions, Coding questions
 - Describe your algorithm as well as write compilable code
 - Round 2
 - General discussion about projects, Software Design questions, Puzzles.
 - Round 3
 - Logic Puzzles
 - Goals in life, Why Oracle etc.
 - Round 4 : HR
 - General Discussion

Sources of Preparation



- Study about Oracle
- GeeksforGeeks tag:Oracle

Courses and Certification

- DBMS, OOP, Java, DSA, C/C++

Other Relevant Information

- Study what Oracle actually does.
- Prepare for aptitude type questions as well as coding questions.
- Prepare for interview questions like, What are your goals, What are your strengths and weaknesses, Why join Oracle and not any other company?

Sector: IT

Name: Hrithik Piyush(2014A8PS474P)

Company: Oracle

Profile: Applications Engineer

Recruitment Procedure

- One test of 2 hours, containing MCQs from aptitude, reasoning, coding and computer science subjects (DBMS, OS, OOP, Networks)
- Another test of 2 hours containing 2 coding questions. Coding questions were pretty straight forward, one on string manipulation and another on graphs
- First question was to check if we can partition a number C into two parts such that one part is divisible by A and the other part is divisible by B , where A and B were given to us, $C \leq 10^{18}$
- Second question was on DFS: Given an arbitrary tree with each node having a cost C_i for traversing that node, and a budget B was given to us. We had to find that how many leaf nodes can we visit from the root node without spending more than B units while traversing a path to a leaf node. Note: Each leaf node had a constraint of B units, and not the entire graph
- 3 Technical Rounds, 1 HR Round
- Technical Round 1:
 - <http://www.geeksforgeeks.org/convert-number-to-words>
 - Asked a similar question to <http://www.programcreek.com/2012/12/leetcode-regular-expression-matching-in-java/> with few more constraints, interviewer was satisfied after few lines of code and the basic approach to handle most of the cases
- Technical Round 2:



- Interviewer asked about myself and then said that this round would be mostly based on puzzles
- He skimmed through my resume and asked me a design problem since I had done a course on Information Retrieval
 - He asked me to design a system which would take surveys from across India and take the problems of users into account and devise a way to focus on the most relevant problems
- He then asked me a set of 5-6 puzzles out of which I was able to answer 3-4 and almost came up with the correct approach for one of the puzzles
 - Puzzles were standard, the approach can be developed by solving 10-15 puzzles of different types
- Technical Round 3:
 - This was the manager round and this round was mostly based on theoretical knowledge
 - An Electronics student could expect basic questions on Amplifiers, Circuit Theory, Microprocessors, Computer Architecture, etc were asked
 - A CS student could expect basic questions on Computer Networks, DAA, Operating Systems & OOP
- HR Round:
 - Basic HR questions like Family Background, Future plans, etc

Sources of Preparation

- InterviewBit, GeeksForGeeks, Coding Interview Questions by Narasimha Karumanchi

Courses and Certification

- DSA, OS, OOP for most of the part of the process

Other Relevant Information

- Practice writing code on paper, they expect full code on paper



Sector: IT

Name: Jay Jodiwal (2014ABPS676P)

Company: Oracle

Profile: Applications Engineer

Recruitment Procedure

- Aptitude / coding based / CS theory based 2 hour test on oracle's online platform. Pretty easy but exhaustive and strict timing for every section (Around 15 sections / subsections were there).
- Coding round: 2 questions. One easy and second moderate. Interface wasn't very supportive. Copy/paste not allowed. Most of the students were shortlisted for the next round based on above two.
- First technical round: 6 questions asked. 2 puzzles and 4 coding based. Coding based were from backtracking, recursion and strings. Questions were easy, provided you don't freak out. They don't expect complete code but they require corner cases to handled properly.
- Second technical round: This round was mostly puzzles and about algorithmic thinking. Involved discussion on project (I made an app as a project, he literally downloaded it in front of me). But interviewer was very helpful and at regular intervals intervened and was solving questions along with me.
- Third technical / 4th HR round: Most people had a decent level of 3rd technical round. But mine technical round was like a HR round. Asked about family, Higher studies plan, siblings. Asked a couple of questions but



they were trivial. Then had an official HR round with cliched HR questions. No need to prepare specifically. Just keep calm and answer wisely.

Sources of Preparation

I did InterviewBit and geeksforgeeks. Prepare as if you are seeing the question in front of an interviewer. Also have a good hands on with coding. You won't get method or library help in their coding rounds and timing is crucial there.

Courses and Certification

No course or certification is necessary. If you answer the relevant question, interviewer considers that you have ample knowledge regarding the particular course.

Other Relevant Information

Just keep calm and think. I saw many people freaking out and getting rejected in first round itself. Just keep interacting and if you are not able to think of a solution, tell him the approach. Don't answer randomly and say frankly if you don't know the solution (in case of theory based direct question otherwise give it a shot and tell him the approach). Practice writing code using pen and paper.

Good Luck !!

Sector: IT

Name: Anjana Asok (2013A3A7244)

Company: Oracle

Profile: Applications Developer

Recruitment Procedure

- Online Test, 3 Technical Rounds, HR
- Test had sections with MCQs on aptitude, logical reasoning, outputs and correct codes for C/C++ programs. The test was easy. However, it is important to maintain speed to finish all questions.
- Interview : First round of the technical interview was entirely DSA-based and a few puzzles. The second round involved coming up with a design for a given problem statement for building an app. He asked to optimize solutions proposed and how to integrate parts across platforms(good knowledge of searching, sorting algorithms and basic knowledge of DBMS required). The third round was an HR-cum-technical round with the manager and was focused on my first discipline – electronics with a question on a BJT-based circuit analysis and a few puzzles.. The final HR round was focused on plans for MS, why Oracle, and relocation issues etc.



- Solving the puzzle/ having a logical approach to it is very important for selection. Also they don't care much about the answer as about the thought process..so walk the interviewer through what you are thinking and ask for clarifications if necessary.

Sources of Preparation

You can look at Geeksforgeeks for last minute revisions on OS, DBMS etc. Also searching for logical puzzles can be helpful.

Courses and Certification

Good knowledge of DSA, DBMS and OS. Course material is more than enough. P.S: You don't need to do competitive coding and still can make it through. (my case ☺)

Other Relevant Information

Attend the PPT and pay attention. One of my 3rd round questions was what did I like about the PPT and what I thought was lacking in it. The interviewers were really nice and helpful, and so, just keep a cool head throughout the process ☺

Sector: IT

Name: Indrajeet Mishra (2014A7PS110P)

Company: Oracle

Profile: Applications Engineer - Applications Development Group

Recruitment Procedure

- **Round 1:** Mainly a general aptitude test with some basic coding skill based question. It contains computer science section in which they ask oop, dbms(very tough for me at least). Since there is no negative marking, try to mark all the questions. You need not any special preparation for this round.
- **Round 2:** It is coding round. There will be two questions of easy difficulty level. However, you need to be careful in implementation.
- **Interviews:** There will be three technical rounds and one H-R round. They will ask some random puzzles also. Try to answer with confidence. They look at your approach mainly and do not look confused at any point.

Sources of Preparation :



Interviewbit, geeksforgeeks.

Courses and Certification

OOP, DBMS, Computer Networks.

Other Relevant Information

Doing competitive coding helps a lot in placements, so, try to enjoy it until you get placed from college.

Sector: IT

Name: Jay Kadam(2016H112164P)

Company: Oracle

Profile: Applications Engineer - Applications Development Group

Recruitment Procedure:

Test 1	Online Test	MCQs
Test 2	Online Test	Coding Questions -2
Technical Round 1		Code on paper
Technical Round 2		System Design, Resume details, Puzzles
Technical Round 3	Managerial Round	Behavioral, Puzzles, Resume details
HR		Offer details, Relocation, Role Details

Test 1: Online Test

It consisted of questions from all possible areas I could have imagined (Quant, LR, Verbal, OS, DB, CN, C, Java, DS, Algorithms, Flowcharts, Pattern recognition etc.). All questions were MCQs. Each section was timed



separately. You need to be speedy to solve all the questions accurately and have patience to complete this test, as it lasts for good 2-2.5 hrs.

Test 2: Online Test

2 coding Questions were to be solved in 60 minutes. Speed is important. One question involved tree construction and traversal (Path sum variation) and the other one involved BIGINTERGER mathematics.

Technical Round 1: Writing code on paper

I was given 4 questions and asked to write code on paper. No hints or help from the interviewers. First question from DP. Second question was 'Count and say'. Third question was 'Sorted permutation rank'. Fourth one was easy for me- 'Print matrix in spiral Order'.

Technical Round 2: Everything possible was asked, Longest round

The interviewer was the finest person I have ever met in any interview. He was a technical manager with around 11 years of experience. I was asked regarding everything I had mentioned on my resume, all the extracurricular activities I have done till now, my 3 years stint at Infosys, project details, some puzzles, system design questions, data warehouse related questions, Advanced SQL queries(lead, lag, top N – all questions were indirect), distributed computing concepts(scaling, h/w requirements, limitations etc.), Java concepts, challenges faced during my stint at Infosys, the code that I wrote last night in the TEST 2 and a little bit of machine learning.

I left no question unanswered. He seemed impressed by the time interview was over and told me that I did good at the interview.

Technical Round 3: Managerial Round

Again, a very senior but very humble person interviewed me. He asked me to tell my 2 achievements and 2 regrets in life, then he went on to ask me details from my resume. I had a lot of projects from ML, DM, Cloud Computing and 3 years of work experience in Data warehousing mentioned on my resume. I had also worked as TA for DW and main lab instructor for on campus DM course, hence he gave me a dataset and asked how would I apply regression on it. I explained him the process, then he asked about increasing accuracy of the results and conversation escalated into advance ML (Concepts such as imbalanced datasets, normalization, SMOTE, ROSE, sampling, BIAS-VARIANCE, curse of high dimensionality etc.) Then he asked me to explain the uses of Bitmap index, b-tree index, which one to use when, difference and similarities between Star Schema and 3NF etc. Finally, I was asked to solve a puzzle and talk about my long-term plans.

In the end, he asked if I had any questions for him. I asked a couple of questions and then he asked me to wait for 5 minutes for HR interaction.

HR Round:



HR screened my resume, asked me about my experience at Infosys, then he explained to me the role, I was being offered, asked if I had any concerns regarding relocation, my 2 strongest personality traits etc. In the end, he asked me to explain my undergrad project.

Sources of Preparation

In the order of importance.

1. Leetcode.com
2. Interviewbit.com
3. GeeksforGeeks.com
4. OS(Godbole), CN (Lecture Slides), DB(Korth)
5. Everything mentioned on Resume
6. TIME CAT notes for aptitude
7. Vedic math videos – Youtube.com
8. Projects in detail

Courses and Certification

1. Data Science Specialization – Johns Hopkins University – Coursera.com
2. Python for Data Science – University of UC – Coursera.com
3. Cloud Computing
4. Advanced Data Mining

Other Relevant Information

Design your resume carefully and be prepared to answer any question from resume.

No questions involved theoretical definitions of concepts, all the questions were either built around some real-life scenarios or were regarding the real-life use of the concepts, so be thorough with everything you study in your books.



Sector: IT

Name: Maaz Mombasawala (2014A7PS051P)

Company: Oracle

Profile: Applications Engineer

Recruitment Procedure

- Online Tests, Interviews, HR
- Online Test 1 had 4 sections
 - English Proficiency – This was fairly easy.
 - Aptitude – This tested logic and math skill. Questions were doable but time consuming. Better to not get stuck doing the same question.
 - Coding Skills – This did not test actual coding skills, but able to read code and recognize its purpose.
 - Computer Science - Tested knowledge about applications and systems courses like OOP and DBS.
- Test was MCQ based and you could not go back to questions after answering. It was a test of patience, even if you found the actual questions easy.
- Online Test 2 was a coding round. Allowed languages were C,C++ and Java. It was moderately easy.
- Interview process consisted of three technical rounds which tested the following



- Coding skills – Writing pseudo-code for the given problem. Problems were moderately to easy coding questions. It is important to clarify exact requirements and write correct code.
- Project work – To elaborate on what you did in projects and internships, and questions that may follow up from that.
- Puzzle – Some puzzle problems. Approach is more important than arriving at the actual answer.
- Course Knowledge – Questions about course content of both CDCs and relevant electives, and questions that may follow from that discussion.
- HR round consisted of telling about your personal details like hobbies and interests, your family, and whether you would be fine with relocating.

Sources of Preparation

Good coding skills are required, so good to do practice online. You should know which data structure or algorithm to apply when faced with a problem. For puzzles, just try to get an idea of how generic logic puzzles are usually solved. Revise your relevant courses.

Courses and Certification

Many questions were asked from applications and systems courses like Database Systems, Operating Systems and Data Structures and Algorithms. Studying these subjects is useful

Other Relevant Information

Good to have an idea of what would be expected of you in your job role.

Sector: IT

Name: Neeraj Varshney (2014A7PS103P)

Company: Oracle

Profile: Application Development

Recruitment Procedure :

- **Online test** comprising of 4 sections . Most of the candidates got through this round . Though the questions were easy but the only constraint was time. There was a specified time limit for every sub section for example , 6 minutes for a subset of 4 questions. For advice for this section is donot spend more than half a minute on any question and move on to the next one.
- **Coding test:** There were 2 questions , very easy. There were only 4 test cases (2 sample + 2 hidden). The test cases were also quite lenient . Some people even left the room within 25 minutes.
- **Interview:** 80 candidates were selected for the interviews. They were maintaining a sheet for every candidate . After every round they were updating that sheet . They were mentioning which skills they have tested and which skills ought to be tested. In the first round they asked me sort an array in which numbers are in range 1..9999. I wrote code for radix sort. Then they asked me to design google's suggestion system. I came up with the Trie approach.



- In the next round I was asked a few puzzles (standard ones) and a question of designing a recommender system.
- The interviewer was very satisfied with my approach and wished me luck for the next round.
- In the last technical round he asked me a puzzle . I answered that puzzle correctly. Then he asked me about the ppt of Oracle (What all things were discussed in the PPT). He also asked me about scalability . Then a 15 minutes discussion on scalability and its types.
- Benefits of denormalization and last question was on how to measure the computers speed(instructions per sec).
- Last HR round was just a formality.

Sources of Preparation

The most recommended is GeeksForGeeks. Practice on InterviewBit

Sector: IT

Name: Kartikeya Gupta (2016H112153P)

Company: Oracle

Profile: Application Engineer

Recruitment Procedure

Test 1: This was an aptitude test of around 2 hrs. It consisted of four parts and had subsections.

1. Coding Skills
2. General Computer Science Skills
3. Verbal
4. Quant

All the sections had predefined time allocated for them. All the section had 5-6 subsection which also had predefined time. This round was tough as you are required to solve like 10 Aptitude Questions in 12 Minutes in each subsection.

Test 2: This was a coding round of about 75 mins. It consisted of two questions. The difficulty was easy to moderate. They were:



1. You are given a big number ($\leq 10^{18}$). Partition the number in two parts such that one of them is divisible by A and the other is divisible by b.
2. You are given a budget and you are at the root of the tree. You need to count how many leaf nodes you can visit in your budget if you have to pay particular cost at each node in the tree.

Technical Round 1: The panel consisted of two people. The interview started with a standard “Tell me about yourself”. Following up, I was asked to describe my favourite project’s problem description and an overall solution. It was followed by many (around 5) coding problems all based on arrays. I was asked to write clean and runnable codes on a paper in a time limit of around 10 min for each question. Some of the coding problems are:

1. Write a program to do a spiral order traversal of a MxN matrix.
2. From all possible interpretations of an array of digits print a string of length X.
3. Given an array with some random numbers, arrange it in such a way that first two elements are in increasing order, next 3 in decreasing order, next 4 in increasing order and so on.
4. Find the rank of 31452 if 12345 is ranked 1st and 54321 is ranked last.

It ran for about 1 hr which was a sort of stress interview. All problems were discussed and checked line by line and had to even write the functions for sorting. Questions were asked like “Which sorting technique to use and why is it suitable in different cases”. Solutions were expected in single traversals only and optimized solutions in first go.

Technical Round 2: I was asked to write a runnable code on paper for converting a float number to its binary string. Then he asked 2 simple puzzles:

1. Given that a dog runs 45km/day in a straight line in a field. The field has an area of 900km². How long can he run in 2 days?
2. Then he gave me some scenario in which cost of some stocks were increasing and decreasing in some years. I had to calculate a time in which buying those stocks was most suitable.

The questions were asked with partial information and I had to come up with solutions taking into consideration those missing pieces. He was impressed that I gave him answers that taking into consideration all possible scenarios. Then he asked me about my work that I am doing in my masters and I described him about my research project with detailed diagrams and its real-life application. He seemed satisfied with my interest areas and forwarded me to the next round. This round was about 45 mins.

Technical Round 3: Due to my good feedback from my previous two rounds this round this round ran for only about 20 mins. I was interviewed by a very senior and experienced person in cloud technologies. Initially questions were like:

1. Tell me about yourself.
2. How was the placement process till now?
3. What are your favourite subjects?
4. Why do you see yourself fit in this role (Applications Engineer profile)?
5. Why you chose Software Systems as your master’s branch?
6. Give me your feedback regarding pre-placement talks.



The main thing he was interested in knowing that how much I was interested in working for company and as a cloud developer. He asked me some basics about networks regarding working of HTTP and Cookies. Lastly, I was asked a simple puzzle about how to measure 5ft from a 3ft and a 4ft sticks in one go (You can't mark or break the sticks).

HR Round: Till this time, I had a feeling that I am almost through. This round ran for about 15 min in which he asked me standard HR questions like:

1. Introduce yourself.
2. Why Oracle?
3. Why this role?
4. What are your expectations as this will be your first job?
5. My location preferences in between Hyderabad and Bangalore.
6. What are your positives and an area in which you would like to see yourself improved?
7. There are many more companies which are also coming to the campus like Amazon and Microsoft. So, which company would you prefer if selected and how do you compare these companies?

This round was an easy one. Just you had to justify that joining an organisation like Oracle would be a great opportunity. Also, my interest areas were matching with the profile offered, so it was easy to justify for myself. Basically, he wanted to see that how honest I was in answering these questions. This was a nice round which ended with a solid handshake and big smiles.

Sources of Preparation

1. InterviewBit
2. GeeksforGeeks Interview Experiences and most popular coding problems company wise.
3. Some Quant and Aptitude preparation from Geeks and Indiabix.

Courses and Certification

Cloud Computing as an elective was quite important. They were interested in the projects that I had done in this course.

Other Relevant Information

Attend the pre-placement talks and pay attention to the part in which they describe the kind of work the company is doing because they are very happy to answer if you ask them questions about these in your interviews. Always explain that project which matches the profile and build a story around it. Rest your confidence is the key and hope for the best. Cheers! :)



Sector: IT

Name: Vivek Nimbarmunde (2016H112166P)

Company: Oracle

Profile: Applications Engineer - Applications Development Group

Recruitment Procedure

- 2 Online Tests

Objective type – 2 hours – divided into English, Aptitude, Software Engineering and Computer Science (mainly involved Operating systems, Database systems, Data structures, Computer networks etc). Each section had further multiple subsections. Fairly easy but each subsection has time limit so need to watch out for that.

Coding test – 1 hour - write code for 2 programs.

- Test was easy. However, it is important to maintain speed to finish all questions. Answer once attempted could not be reattempted. You can however skip a question and answer it later within the stipulated time period.
- Four interview rounds– 2 Technical , 1 Manager and 1 HR.



- First round – 3 problems were given and was supposed to code and explain the code. Gave roughly 10 minutes for each problem.
- Second round – This round was taken by a senior manager. Resume was scanned thoroughly and project details were asked. Since the profile was cloud based, they gave special attention to the projects in this area. Puzzles were also asked.
- Third round – This round was taken by Vice President of Oracle Application labs. He asked about career aspirations, previous work experience, if any. He also scanned the resume and asked about projects related to machine learning and cloud computing. He also asked some puzzles which required knowledge of Probability and Permutation and Combination.
- Fourth round – HR asked about my background, what I knew about Oracle and Oracle Cloud products and general questions like strengths, weaknesses, hobbies, extra-curricular activities, preference for job location.

Sources of Preparation

GeeksforGeeks.org for preparation of theoretical subjects for first round and coding questions.

Standard puzzles – can be referred from InterviewBit.

Projects – need to be prepared thoroughly.

Coding practice can be done on InterviewBit or HackerRank.

Other Relevant Information

Very important to prepare projects mentioned in the resume, especially the ones which are closely related to the profile for which you are interviewing.

Always try to understand the question completely. Ask multiple times if not fully clear. If you are not able to solve a given problem, ask for hints or mention your approach to them so that they can help you.

Most of the candidates were filtered in first and second round.



Sector: IT

Name: Kartikey Shahi (2014A3PS275P)

Company: Oracle

Profile: Application Developer

Recruitment Procedure:

Round 1: Online Aptitude test with 3-4 sections each having 4-5 sub sections with individual time limit for each sub section.

Round 2: Online coding round. One hour- 2 questions. Just 2 sample cases and 2 hidden cases checked. The platform used for the test not very good.

- About 60 students shortlisted for interviews.

Interview Round one: Very basic, Easy and rather irritating questions for which they want you to write a code on paper (Which they take time to understand).

Interview Round 2: Most students get eliminated in this round. Brief information about projects and then 2 puzzles. You need to get both correct to get through to the next round.



Puzzle one: You have 5 jars with infinite candies with 4 of them containing a candies that weigh 10g while one contains 9g candies. You are provided with a Electronic Weighing Machine, Find in a single weigh, the jar that contains the 9g candies.

Puzzle two: There are 4 jars out of which 3 are good and one is poisonous, using 2 subjects willing to die, find the poisonous jar.

Round 3: Discussion about anything you like. For some it was on machine learning, some people were asked about ADVD, Micro-processors. They sometimes force a topic on you even if you don't wish to. I refused to answer questions on Electronics so he asked me my strongest course and asked me questions on finance.

Round 4: HR round, just a formality, Nothing of value asked.

Sources of Preparation

Any CAT preparation book or some relevant notes for Aptitude and general coding practice.

Courses and Certification

Just basic coding practice through GeeksforGeeks, Interviewbit etc.

Other Relevant Information

Prepare your Introduction well and be ready to face questions like why do you wish to join, what qualities do you bring to the firm etc.

Sector: IT

Name: Saksham Kumar (2016H1030081P)

Company: Oracle Server Technologies

Profile: Software Developer (MTS-Server Technologies)

Recruitment Procedure

- The drive started with two online tests conducted for everyone. CGPA cutoff for applying was 7.

Test 1: The first test consisted of four sections corresponding to Quantitative Aptitude, Logical Reasoning, Computer Science (C, OS, DBMS, etc), and Software Engineering Aptitude (Having two case studies and following questions). All sections had a certain time limit.

Tip: Practice enough to increase speed of Aptitude. Some good sources are Books by Arun Sharma, M. Tyra. Develop a strong basic understanding of Core CS subjects (OS, CN, DBMS, DS and Algorithms).



Test 2: The second online test was a one hour coding round with two problems:

Problem 1: Given a tree and an integer sum, find the path (starting from root, ending at a leaf) which has the minimum depth. Approach: use recursion (modified inorder traversal).

Problem 2: Given a very large number N as a string and two numbers n_1 and n_2 , find a split point where if we split N into two parts, they will be divisible by n_1 and n_2 . If p_1 is first part and p_2 is second part then either $p_1 \% n_1 == 0$ and $p_2 \% n_2 == 0$ OR $p_1 \% n_2 == 0$ and $p_2 \% n_1 == 0$.

Approach: Do a single linear pass for all positions and test the conditions.

Tip: There is no substitute of practice here. Start from platforms like InterviewBit, and move on to HackerRank. Read content from GeeksForGeeks if you are stuck. GeeksForGeeks is wonderful source for preparation of Algorithms. However take care, since simple reading of posts will not sharpen your coding skills.

- After written round about 45 students were shortlisted for ST profile and 65 for App Dev profile.
- Technical Round 1:

The interviewer asked me some questions about my projects from internships. Then he asked have you done a course on Cloud computing. I told about a mini project I did on cloud. He asked questions that how would you ensure scalability, fault tolerance, etc. Then he asked some algorithm questions

1. Implement in order traversal.
2. Given a matrix of 0s and 1s where 1s signify islands. Find the number of islands. I told a DFS approach, he asked to code it. The problem is available on GeeksForGeeks.
3. An array consists of repeating elements except one. Find that element. Approach: Hashmap. Standard statement for this is available on GeeksForGeeks.
4. Some questions on OOP, Java.

- Technical Round 2:

The interviewer asked again about cloud, scalability and fault tolerance issues. She also asked about OS concepts. And some questions on Algorithms.

What is paging? What is segmentation? What is the problem with paging?

- Technical Round 3:

This was with a senior vice president of the company. He mainly asked about my projects. What was the most challenging part in one the projects. How were you able to tackle the issues that you faced? Tell me about a point where you almost thought that you will lose the project but somehow you did.

Some good questions with cloud computing. The profile Server Technologies is more associated to Cloud.

Given an online stream of integers find the k th minimum of the stream at any point. This is solved by min heaps.



When presented with a problem statement how would you approach towards a solution? What would be your first steps? Why oracle?

- HR Round:

The HR then took a 25 minute round asking for my details, like hometown, willingness to relocate, etc.

And then usual questions: Tell me about yourself, why oracle, why should we take you, your strengths, weakness.

Why would you join oracle if you have Amazon visiting with AWS. Why did you join ME right after your BTech?

Sources of Preparation

The most recommended is GeeksForGeeks. Practice on InterviewBit and HackerRank.

Courses and Certification

My elective at Cloud Computing helped me a lot.

Sector: IT

Name: Anirudh Venu (2013B5A3355P)

Company: Oracle

Profile: Oracle Server Technologies

Recruitment Procedure

- Test 1: MCQ with different sections involving Verbal, Quantitative Aptitude, Logical Reasoning, Coding (mainly DSA and DBS related questions). Important thing to note, once you submit your answer you cannot change it.
- Test 2: Coding test comprising of two questions.
- **Interview Round 1:** 2 DSA questions (write code on problems involving linked lists and arrays), 1 Brain Teaser.
- **Interview Round 2:** Singleton design pattern, Traversal in trees, maintaining frequency count of each word in a sentence (Code for everything)



- **Interview Round 3:** Questions regarding projects (what I found most challenging within my projects and what I did to handle the challenge), OS questions and write code for causing segmentation fault and core dump.
- **Interview Round 4:** HR-Behavioural questions. The most important of which was where I see myself fitting into the company given my background.

Sources of Preparation

InterviewBit, GeeksforGeeks, DSA Made Easy: Data Structures and Algorithmic Puzzles by Narasimha Karumanchi (extremely good for prepping in a short time frame)

Courses and Certification

OOP, OS.

Other Relevant Information

As cliched as this may sound, try to do as much as you can in the summer leading to placements. It really helps and a lot of people do better purely because of the time they put in during those months.

For the interviews (besides the subject matter):

- Make sure you know your projects & internships back to front. Anything that is on your resume should be defensible. You may even want to think about what you learned, what was challenging & how you handled these challenges?
- You may also want to look at questions like where you fit into the company (especially if you're from a non-computer science background), what are your strengths and work on your introduction.

Sector: IT

Name: Mihir Sharad Saxena (2014A7PS098P)

Company: Oracle

Profile: Server Technological Operations

Recruitment Procedure

- Resume Shortlisting, 2 Online Tests, 3 Technical face to face Interviews, 1 HR
- Test 1 had 4 sections: Technical MCQ, Aptitude, English, one more generic round

Test 2 had 2 coding questions

- Interview Questions:
 - a. Round-1 (4 Coding questions, Self introduction, 2 Resume Projects)
 - b. Round -2 (Deep knowledge of OS and OOP/DBMS (as per what you say))



- c. Round-3 (Resume, basics of Computer Science(precedence of operators, Little Endian, etc.)
- d. HR(Self Intro and Why do you want to join the company)

Sources of Preparation

Interviewbit(extensively) and GeeksForGeeks past interview experiences of Amazon

Interview Questions for Java and DBMS

Lecture Slides for Theory Subjects(OS, DBMS, OOP Concepts)

Also focus upon Computer Networks, some candidates were asked questions from it.

Sector: IT

Name: Akshit Johry (2014A7PS077P)

Company: Oracle

Profile: Server Tech

Recruitment Procedure:

Online Round 1:

- Test had questions on Aptitude, OS, OOP, DBMS, Data structures, Communication skills, Passage based, Observational skills. Had negative marking.
- CAN'T RETURN TO A QUESTION ONCE ATTEMPTED, TAKE CARE
- Section wise timing so take breaks and give it calmly but steadily maintaining speed



Online Round 2:

- 2 Coding questions.
- Keep calm and brute force if nothing strikes
- 1 hour for two questions, use wisely

Interview Round 1:

- Introduction about projects, detailed working for one of them
- System Design problem
- One Algorithm question(Standard problem)

Interview Round 2:

- Compiler questions (Since I had mentioned compiler project)
- Puzzle
- Algorithm Question: I couldnt code but discussed the best approach I had
- Trick C++ question: Implement addition without plus operator, used xor approach

Interview Round 3:

- Discussed project
- Friendly interview: He was asking me extra curriculars
- One simple question,
- One simple DSA question

HR

- Standard questions

Sources of Preparation:

- All questions were some minor change to an “interview bit” problem. Practice them thoroughly
- Geeks for geeks company wise archives
- Last Minute Notes Geeks for geeks for OS, OOP etc.

Other Relevant Info:

They prefer non-droppers, single degree CS very much. Study subjects because the interviews were very balanced and interviewers are knowledgeable. You don't need to be 100% right but you should be able to think what are the possibilities of a right answer. Place Oracle wisely in the order of Day 1 companies.



BITS Pilani

Pilani Campus

Sector: IT

Name: Hiresh Gupta (2014A7PS163P)

Company: AppDynamics

Profile: Software Engineer

Recruitment Procedure:

- **Online Test:** The online test comprised of ten MCQs involving some basic concepts of DSA, OS and Networks, and four coding questions on graphs (basic traversal), arrays, dynamic programming (1D) and a variant of knap-sack problem. Twenty students were shortlisted for the next round.
- **Technical Interview:** The interview (3 rounds) was geared towards data structures & algorithms (trees, graphs and dp), OS and Networks in depth with a slight increase in complexity after each round.

Sources of Preparation



- Practice questions on interviewbit.com and geeksforgeeks.org.
- Do look up for past interview questions and interview experiences before giving any test/interview.

Courses and Certification

- DSA, OS, OOP, ML and Networks.

Sector: IT

Name: Pryanishu Arora(2013B4A7601P)

Company: Appdynamics

Profile: Software Engineer

Recruitment Procedure

- Online test – Of duration 1.5 hrs containing 10 MCQ questions and 4 coding questions .
- MCQ questions were easy and were based on concepts from OOP , DBMS and OS.
- The first 2 coding questions were very easy and needed a brute force solution.
- The 3rd and 4th question required a dynamic programming approach .
- In 3rd question one needed to find the longest subsequence in an array of given characters which contained the vowel sequence 'aeiou' in order. Ex- 'aerriituuouhiie' has answer 'aeiou' ,similary array has no such sequence thus answer is -1.
- In 4th question , a dynamic programming similar to subset sum problem was required to be found.



- 19 students were shortlisted . The ones who did all 4 coding questions and some of the people who did 3 but performed very good in MCQ.
- I had three interviews:
- In the first interview , I was asked to implement the stl vector in c++.The he asked me about some concepts of database sharding and indexing in dbms.Also asked to implement Dijkstra algorithm and explain its correctness.
- In the 2nd interview, The interviewer asked to mathematically prove the algorithm for finding the loop in a linked list . He didn't ask me the algorithm but just the mathematical proof of it.
- Then he asked me to find if for a given diophantine equation the solution existed or not . He expected a dynamic programming approach for the question rather than a mathematical approach. Only the existence of the solution was to be proven in $O(n)$.
- In the 3rd interview , the interviewer asked to code a question on paper . The problem was to print all nodes which are at K distance from a given node in a binary tree. The binary tree had pointers from parent to child node but not from child to parent .
- Basically the level of questions was good and they expected a fairly good proficiency in programming language which you claim to know .

Sources of Preparation

- Geeksforgeeks , InterviewBit and tutorialpoint for OOP and OS.

Courses and Certification

- Expected knowledge of Data Structures and Algorithms , Operating Systems , OOP and DBMS.

Other Relevant Information

- Interviewers were also interested in System Design problems

Sector: IT

Name: Shavak Agrawal (2014A7PS076P)

Company: Microsoft IDC

Profile: Machine Learning Research Engineer

Recruitment Procedure

- The recruitment process for Microsoft usually consists of a Coding Test followed by a 3-4 round of interviews.
- The **coding test** is mostly comprised of 2 elementary questions (2 + 3 mks) with one difficult (5 mks) one. Mostly people who had solved all 3 questions were shortlisted. The test has multiple sets and there are 2 completely different sets of 3 questions each.



- The interview process starts off with a **Group Fly** process wherein they give 2 questions to a class of 30 people or so and ask them to solve these on pen and paper. Each group of 6 students was assigned an interviewer for this round who was there to answer any doubts that you had. Make sure to handle all the corner cases and also ask them about the same. Around 30 people were shortlisted from 2 such groups.
- This particular profile wasn't being offered by them when they had come to campus initially and when I expressed my interest for Machine Learning in the **first round**, during which they were asking about my interests and projects, they started a separate process for the same.
- The **second round** was a telephonic/Skype round wherein I was interviewed by a Group Manager for AI and Research in India. My entire interview was based around the projects I had done as part of my internship and reasons for doing and not doing certain things. I was also given a design problem wherein he asked me to frame the problem (i.e. find the parallel to a pre-existing problem) of extracting relevant information out of a bill payment email from an email inbox.
- The **third round** was a technical round which focused on some coding problems, puzzles and some OS. The coding problem was to rotate a matrix by 90° and OS questions were centred around differences between a process and a thread.

Sources of Preparation

Solve some previous year questions on InterviewBit and also look at interview experiences on GeeksForGeeks.

Courses and Certification

You should have a strong ML profile if you hope to get this profile.

Sector: IT

Name: Kirti Singh Rathore (2016H103070P)

Company: Microsoft IDC

Profile: Software Engineering/ Research Engineering (M.L.)

Recruitment Procedure:

Online Coding Test - 3 questions: try to provide optimized solutions.

1. Find minimum depth for which sum of nodes from root until leaf node equal to given sum.
2. Find if the binary representation of given number is a palindrome or not.
3. Find sum of leaders in array. Leader: element which is greater than all elements to its right.

Group fly - 2 Coding questions, try to communicate your approach to your mentor.



1. Find if a 1-d char array was present in a 2-d char array. The string could be present through multiple rows and columns, like a crossword.
2. Find a rogue node in a BST, and correct it.

Technical Interview 1

- Sum of 2 numbers stored in a linked list. I provided an approach the interviewer liked a lot. The interview went on for around an hour.

Technical Interview 2

- Find duplicates in an array. Then converted it into a scalability problem. Turned out into a very interesting discussion.

Technical Interview 3

- Quite a light interview. After some casual discussion he read my resume, and asked me to explain a project

I really liked. After this I had to write code on a small section of it.

Sources of Preparation

Topics from geeksforgeeks. It almost is a complete repository.

Courses and Certification

No special courses that were required. Just need to have good coding skills.

Sector: IT

Name: Anshul Chhabra (2013B2A7803P)

Company: Microsoft IDC

Profile: Software Engineer

Recruitment Procedure

1) Online Coding Test - This had 3 questions (1.5 hours)

- 1) Given n numbers , 3 numbers appear even number of times , all others appear odd number of times , Find the three numbers which appear even number of times.
- 2) Given a number , you have to check its binary representation is palindromic or not without using extra space.



- 3) Given a number k , find the minimum depth such that root to leaf node path has this sum k . If there is no such depth return -1 ;

2) Group Fly round - Around 80 students were shortlisted for this round (45 mins)

- We were divided into groups of 6, Each group was assigned a mentor with whom we had to discuss the doubts and our approaches to solve the question
- We had to also write the code for both the problems
- Problem 1) - Given a string, check whether it exists in a 2D matrix of characters, You can only go in right and down direction.
- Problem 2) - Given a bst, there is one node which is not satisfying the binary search property. Find the bad node and then correct the bst.

3) Technical Interview 1 - After the group fly round they divided students into two lists. First list had 9 students. and second had around 20 students. In group fly round they basically check how fast you solve the problem and what kind of doubts you ask.

My technical round 1 lasted for around 1 hour. He asked me 4 questions and few questions on the resume.

Question 1) Implement a stack using linked list and array.

Question 2) was same as the problem 2 of group fly round.

Question 3) Find the maximum for each window of size k .

Questions 4) One by one number are coming as input, you have to find the k th maximum number till now.

For first two questions I had to write the complete code, For other 2 he just asked me to tell my approach. Then he asked me few questions on my resume related to the compiler project.

4) Technical Round 2 - This round went for around 2 hours.

First problem was to design a simple calculator. Interviewer wanted to know all the test cases I will handle. Then I was asked questions about my other two projects which were on Information Retrieval.

Second Problem was - Infinite stream of characters is coming, you have to print all the meaning full words according to the English dictionary. I solved it using Trie.

I had to write the code for both the problems and simulate them on few test cases.

5) Technical Round 3 - This lasted for just 30 mins. I was asked to explain my internship project.

And finally he gave me a puzzle to solve.

Given an array of size n , each number in array is between 0 to $n-1$, the array is not sorted, return the first number which is occurring twice without doing a linear scan of the array.



Sources of Preparation

Interview bit and geeksforgeeks.

Courses and Certification

Data Structures and algorithms , Operating Systems , DBMS , Computer Networks , Compiler Design.

Sector: IT

Name: Abhinav Gupta (2014A7PS335P)

Company: Microsoft IDC

Profile: Software Engineer

Recruitment Procedure

- Coding Round – three coding questions to test your basic coding skills and algorithms. Questions are easy and can be solved with basic programming skills



- Written test – two questions to be solved under an hour. The code is to be handwritten in your preferred language. Better questions than previous round. Need some experience with problem solving techniques like dynamic programming, backtracking and greedy
- Technical interviews – Introduce yourself properly. Coding questions asked. Error free code is expected. Explain your thinking process properly. They ask you to trace your program for a sample input. Don't write anything on resume that you haven't revised. Questions about Networking and machine learning were asked from me.

Sources of Preparation

- Competitive programming helps. Interviewbit is a good place to start if you don't have much experience but need to clear coding rounds. Focus on the solution approach rather than mugging the solutions.
- Revise your courses and prepare something to say about anything written on your resume. Also look at company wise interview question banks on internet. A lot of questions are common for many companies. I was asked many common questions in interviews for goldman sachs, oracle and microsoft.

Learn about your preferred coding language. You can expect them to go deep in the knowledge of your coding language, available constructs, language semantics.

Courses and Certification

Operating systems, computer networks, database systems, data structures and algorithms, object oriented concepts, Machine learning and neural nets for data science profiles, competitive programming participation(asked by D E Shaw)

Other Relevant Information

There is a proper way to prepare for placements. Your cg or programming won't necessarily help you in this. Take a goal centric approach to prepare for selection process. Do things that help you specifically in clearing the interviews and coding rounds. Study your previous courses but only till they help you answer the interview questions. Do programming only till it helps you clear the coding rounds. Improve your speaking and presentation skills only till it helps you express your ideas clearly. Being a master in one of those is good but not necessary. Use sample questions to benchmark yourself.

Sector: IT

Name: Paritosh Verma (2014A7PS018P)

Company: Microsoft IDC

Profile: Software Engineer

Recruitment Procedure

Recruitment procedure was divided into 3 parts.

1. Online Test
2. Group Discussion/ Group fly



3. Three technical rounds

- **Online Test** – Test had 3 programming questions which were sampled from a pool of questions for every student (as a result the difficulty of questions varied). The test was relatively easy as compared to the online test of other companies and standard algorithmic questions were asked. As a result speed became an important factor for cracking the test.
- **Group Discussion/fly** - All the students selected from the test were divided into groups of 6 students each and were given two algorithmic questions and were expected to write the code for them (on paper). It was an individual task and we were not supposed to discuss anything with the group. Good quality questions that focused on fundamentals were asked in this round.
- **Technical rounds/ Interviews**- Interviews were mainly focused on algorithmic questions and projects. You should also be familiar with your elective courses (the ones you have mentioned).

Sources of Preparation-

1. GeeksforGeeks/Interviewbit
2. DSA course material

Courses and Certification

Microsoft's interview questions are designed to test the computer science fundamentals of the student. Revising the course work is really important, especially the following courses (listed in decreasing order of importance).

1. DSA
2. Operating systems
3. Database systems
4. Computer Networks
5. OOP

Other Relevant Information

Last minute preparations won't work, start early . Best of Luck and Happy Placements©.

Sector: IT

Name: Gunjan Goel (2016H103068P)

Company: Microsoft IDC

Profile: Software Engineer

Recruitment Procedure

Round 1 (Written Test): Test had 3 questions:



1. Calculate the sum of two integers and if the number of digits in sum equal to one of the integer then return sum else return n.
2. Find if a number has binary palindrome and count the number of set bits
3. Connect nodes at same level in a binary tree

Round 2 (Group Fly round): It was at 6:30am, so you have to make you mind work at all the time. They divided all the shortlisted students in groups of 2 and per 6 students one interviewer was assigned. It had 2 questions that need to be solved in 40 mins.

Tip: Ask various questions with you interviewer and discuss your approach. They give marks for that.

1. Given a 2D array with characters you have to find whether a given string exists in the matrix or not. You can move only in left-> right or top->right direction. (Backtracking/Recursion)
2. Given a BST, there is a bad node that violates the property of BST. So you need to find that node and correct it.

Round 3 (F2F) : The interviewer was BITS alumni 1991 passout. He first asked me about my project every minute detail of it. Then he asked about the database structure of the project - every single table and asked me to make it better. He then asked me to write some of the SQL queries related to that database.

Data structure : Find a duplicate element in the array where the range of elements is 1 to n. I gave that negative element approach but he asked me to optimise it to less than $O(n)$. I couldn't do that part but he then wrapped up the interview.

Round 4 (F2F) : Design Question for Token management.

He asked me to design a system where tokens are automatically generated and counters are assigned to them. E.g SBI bank/customer center. He told me to write the classes that are involved for this. The interviewer was very helping and he made me think. He really liked my approach and told me to continue with it.

Solution: I created 3 classes for the system Counter(counter_id, current_token, state) Token(Token_id) TokenManager (List<Tokens> , List<Counter>). Methods like assignCounter() , findFreeCounter() etc. were explained. He was very particular about class and method names and told me to change one or the other name. It was 1hour 30 minutes long discussion.

In the end, he told me it was long though great discussion and it's good to have you here. :-)

Round 5(F2F) :

The interviewer was a serious guy and asked me to subtract two strings in a way that the chars in second string should be removed from the first string(in-place). Assume string to be char array.



Approach 1: Add all the chars of second string to a hashset and for every char that matches take the substring before it and after it. $O(n^2)$.

Approach 2: Queue based add all the chars that are not present into the queue and add it back to the char array. $O(n)$ time $O(n)$ space.

Approach 3 : He asked me to improve it further and I gave an $O(n)$ solution using 2 pointers.

```
int j=-1;
for(int i=0;i<n;i++)
{
    if(!set.contains(s[i])
    {
        arr[++j]=s[i];
    }
}
arr[++j]='\0';
```

He was happy with my solution and then asked to discuss a design question.

He then asked me to design an order management system of MC-Donalds. What are the APIs available, which are client , server and how kitchen gets to know about the new order.

And then after 5 minutes we got our results and it was really a very proud moment.

Tip : You need to have a lot of patience because interview rounds takes a lot of time. It was a 12 hours process so be calm and patient. All the best pals.....

Sector: IT

Name: Shivam Gupta (2014A7PS066P)

Company: Microsoft IDC

Profile: Software Engineering

Recruitment Procedure

- **Online coding round** on microsoft's CoCubes platform. This test is comparatively simple with 3 coding questions. (Around 30-35 candidates were shortlisted.)



- **Group Fly Round** – It was a knockout round wherein they gave us 2 coding questions and we had to write their solutions on a piece of paper in 45 mins.
- Given a matrix of characters, find whether a given string can be formed by traversing the matrix.
- Given a BST, one of the nodes in the BST does not follow its properties. Find that node and delete it
- **3 Technical Interviews**
 - 1. First Round**
 - General discussion on my projects.
 - <http://www.geeksforgeeks.org/reverse-words-in-a-given-string/>
 - <http://www.geeksforgeeks.org/find-the-smallest-window-in-a-string-containing-all-characters-of-another-string/>
 - 2. Second Round**
 - This round was completely based on a single design question. Design a music player system.
 - 3. Third Round**
 - Discussion on my projects, some questions from Computer Networks, DBMS, OS scheduling algorithms, SQL query.
 - <http://www.geeksforgeeks.org/reverse-a-list-in-groups-of-given-size/>
 - Database design question.

Sources of Preparation

- Practice each and every question from interviewbit.
- Company specific practice from practice.geeksforgeeks.org
- Lecture slides for OOP, OS, DBMS, Computer Networks, DSA

Courses and Certification

- Be clear with your concepts in OOP, OS, DBMS, Computer Networks, DSA.
- Good understanding of design patterns is very important. One of my entire interviews was based on this.

Other Relevant Information

Go through interview experience from geeksforgeeks for the company you are sitting for at least a day before interview

Sector: IT

Name : Pranjal Gupta (2013B4A7470P)

Company: Microsoft IDC



Profile: Software Engineer

Recruitment Procedure

1. Online Coding Round :

Three simple Adhoc questions to be solved in 75 minutes. Emphasis is highly on optimizing the algorithm for minimum time and space complexity.

2. Group Fly: 2 coding question given to solve on paper.

1. **3-dimensional DP problem** : To match a given word in a 2D-matrix of characters such that the possible movement is only to right and down.

2. **BST Tree** : To detect an anomaly in the tree and correct it.

3. Technical Round 1

2 easy technical questions involving recursion and array to be written in any language. Emphasis was given to improve the time and space complexity to the maximum. Interviewer asked to construct all possible cases to check the program and make required changes to handle these in the written code.

4. Technical Round 2

The interviewer had my papers from the Group Fly round, gave me cases for which my second question was wrong and asked to correct it. I came up with several different approach and ultimately gave the correct logic for the question

The other question was a design problem using an Object-oriented approach to develop a token management system, wherein a token is marked with one of the given n pointers. The interviewer started with a very basic implementation, but added features to be implemented as the question progressed.

5. Technical Round 3

- a) To design a Management system for McDonald's using a object oriented approach. This was architecturally more complex than the previous question.

- b) To design all the relevant tables necessary for storing data from the above system on a cloud database.

Sources of Preparation

GeeksForGeeks, InterviewBit (everything !), SPOJ

Courses and Certification

OOP and DBMS

Other Relevant Information

The key in all technical rounds is to keep discussing your ideas even if you are not completely sure about it. Interviewers keep the question vague, so I kept on asking things, and they appreciated that. They want to



BITS Pilani
Pilani Campus

test your thinking and approach, not how much you know standard codes. The design questions easily tests that.

Sector: IT

Name: Geeta Bansal (2013B1A3862P)

Company: Microsoft IDC

Profile: Software Engineer





Recruitment Procedure

1. Online test: 3 questions, need to solve all 3 of them to get shortlisted for the next round
2. Group fly round: 2 questions need to be solved on pen and paper, discuss your approach with the mentors allotted. Solved both the questions correctly to make it to the next round
3. Technical Interview 1: 2 programming questions, need to cover all the test cases. The first question was to find anagrams of a word in a newspaper article and the second question was based on linked lists. The questions weren't direct. He had given some real-life scenarios and accordingly I had to model the question and then solve.
4. Technical Interview 2: 1 modelling question, OS concepts (paging, threads, processes), OOP concepts, design question (design a chess game)
5. Interview 3: Semi-technical (OS concepts) and semi-HR

Sources of Preparation:

geeksforgeeks and Interviewbit more than sufficient.

Courses and Certification:

OOP, OS, DBMS, Computer Networks preferred

Other Relevant Information:

Do practice some design questions beforehand, OS and OOP concepts should be pretty clear

Sector: IT

Name: Mihir Sharad Saxena (2014A7PS098P)

Company: Amazon

Profile: Software Engineer



Recruitment Procedure

- Resume Shortlisting, Online Coding Test, 3 Technical face to face Interviews, 1 Telephonic Interview
- Test had 2 sections:
 - a. Technical MCQs
 - b. 2 Coding Questions
- Questions:
 - a. Round-1 (4 Coding questions, Self introduction, 1 Resume Project)
 - b. Round -2 (exactly same as above, slightly tough)
 - c. Round-3 (1 Coding questions, then questions on DBMS and OOP)
 - d. Telephonic Round(Projects Discussion, 4 real based problems to be solved using Data Structures and Algorithms)

Sources of Preparation

Interviewbit (extensively) and GeeksForGeeks past interview experiences of Amazon

Interview Questions for Java and DBMS

Sector: IT

Name: Deepanshu Gupta (2013B2A7850P)

Company: Amazon



Profile: Software Development Engineer

Recruitment Procedure

- **Online Test:** Several technical questions in OS, OOP and DSA etc. Along with it there were 2 coding questions.
 - o Calculate how many different palindromic partitioning is possible for a string.
 - o Given a paragraph find the shortest interval in which a given words appear.
- **Technical Round 1:**
- Clone a linked list: <http://www.geeksforgeeks.org/a-linked-list-with-next-and-arbitpointer/>
- Given a tree (left child pointer and right child pointer) and a random pointer and a distance 'k'. find out how many nodes are present in this tree.
- **Technical Round 2:**
<http://www.geeksforgeeks.org/given-sorted-dictionary-find-precedence-characters/>
- **Technical Round 3:** Question based on resume. 2 questions:
 1. Longest palindromic subsequence.
 2. Longest palindromic substring
- **Technical HR:**
- <http://www.geeksforgeeks.org/reverse-a-list-in-groups-of-givensize/>
 - Implement Autocomplete feature.
 - Questions based on projects. Scalability issues, topics regarding your work.

Sources of Preparation

- Interviewbit and geeksforgeeks.

Other Relevant Information

- Amazon will mostly ask questions from dp and graphs

Sector: IT



Name: Anish Shah (2013B1A7856P)

Company: Samsung Research Bangalore

Profile: Technical

Recruitment Procedure

- Coding test for 3 hours, long and no STL allowed, only C/C++/Java
- 2 rounds of 1 hour long technical interviews covering a wide array of computer science courses especially OS, Computer Architecture, Compilers, along with applied Machine Learning and Data Mining. Also about projects. Quite tough.
- 1 HR interview

Sources of Preparation

Interns, Coursework, Interviewbit

Courses and Certification

Operating Systems, Computer Architecture, Data Mining, Machine Learning

Other Relevant Information

Sector: IT



Name: Rishabh Joshi (2014A7PS102P)

Company: Samsung Bangalore

Profile: Research Profile

Recruitment Procedure :

- I was a PPO holder in Samsung Bangalore. PPO is only offered for the developer profile. The CG cutoff for PPO holders was 8.5 to be able to sit for the research profile interviews. PPO holders were not required to give the coding test for Samsung.
- First round of interview – We discussed about my projects. Since they were heavily related to Machine Learning, and I had done courses on Information Retrieval and Neural Networks, the majority of the discussion was related to Machine Learning. The questions started from the need of ML and went on in detail describing the various activation functions of Neural Networks and when and why one should be preferred over the other. More ML and Deep Learning discussion followed. Basically you are not expected to be an expert in the field but, you should be able to talk in depth on anything related to your project or achievement. I was asked questions on HOG, CNN, Haar, etc due to my projects and competitions. The round also had a bit discussion on OS. It had standard questions from Geeks.
- Second round of interview – The interview Guy was a Computer Vision person. He started grilling on CNN and neural networks in general. He also asked about Gabor filters (again that was on my resume). A little discussion about ML was followed by Computer Architecture and Networks. I must admit that I am weakest in Comp Arch and Networks. I had not prepared Carch at all, and had only seen the top questions of networks from Geeks. I really struggled in the Carch questions but could answer some Network ones. The discussion ended with some more discussion on Machine Learning.
- Third round of interview – This was a small HR round. I was also sitting in the Interviews for Nutanix, which was my dream attempt (ctc > 1.75 times the PPO CTC). I had Samsung Research as my first preference in the Day1 companies. I made it clear to the HR that I am not interested in Nutanix and the attempt was only because “I could”. She asked me what would you choose if we didnt offer you research. I only reiterated that “Ill see you in Samsung next year, no matter the outcome of this process ;) .” The discussion ended with me suggesting some places for her to see in the campus before she leaves. She only informed that it was a little on the positive side for me and I should wait for the final results.

Sources of Preparation

- InterviewBit – for coding



- Codeforces – for coding
- Geeks for Geeks – for important questions
- Slides of courses – for overview
- Project reports – for resume prep

Courses and Certification

Courses done by me – NNFL, IR, Parallel Computing, Pattern Recognition, ML specialization (online)

Other Relevant Information

Nothing particular. Prepare well and start early. Start by 3-1 end or the winters. You'll have a head start in the 2 months summer. Dont hesitate to contact seniors for tips. Also every case is unique. I am more inclined towards research, and that has influenced a lot of my decisions like putting samsung research as the top preference, accepting the PPO, taking Nutanix lite in the last round (bombed it) (meaning I was okay with samsung R&D dev , over nutanix (if not research)) so you should go for companies according to your preferences. I would suggest go for Nutanix if you are completely into dev and are interested in Virtualization, Server, Cloud etc.

Sector: IT

Name: Siddharth Kannan (2014A3PS219P)



Company: Samsung R&D Institute, Bangalore

Profile: Research profile

Recruitment Procedure

1. **Online Coding round:** 1 question to be solved in 3 hours. There would be total of 10 cases. In order to get to next round candidate must clear all 10 of them. Expect questions on Graph traversals and puzzles based on these. Also questions on dynamic programming and backtracking are quite likely.
2. **Technical Round 1:** The first round in my case was completely project oriented. A very thorough understanding of the objective, method of implementation, application and theoretical aspects of the projects displayed on the resume is required. For example, my projects were based on convolutional neural networks. I was asked to explain the convolution process occurring in these kinds of networks. Moreover I was also asked about how much memory these networks would occupy. There was a question about how to go about constructing these networks and also about the literature review I did before choosing the method I had adopted. Apart from projects I was asked questions on topics which I had mentioned as electives in my resume. This round generally takes about 45 minutes if things are going well I suppose.
3. **Technical round 2:** This was an extremely challenging and testing round. Depending on the interviewer it may go smooth or may completely ruffle you up. Starting off about my projects, we gradually moved into designing real world applications based on my project, while integrating concepts from the courses I had done. My interests were in computer vision and I was asked to surveillance system and asked questions on how I would schedule input coming from various cameras and feed them to a CNN for processing. Basically scheduling algorithms were being tested with CNNs in the backdrop. Interviewers would dig deep into the topic in discussion and see how well you are able to incorporate concepts from the various courses you have done to solve the problem they are presenting to you. Hence, a good feel of the applications of the theory, one has learnt, is necessary. Even if it is an IT job and the candidate is from core background, she/he will be tested on the core topics. So EEE/ENI people cannot be oblivious to their disciplinary courses as the interviewers are very qualified people have knowledge of diverse disciplines from their years of experience. Hence, this round is by no means a cakewalk. Surprisingly I was not asked to code up a single question in the Technical rounds.
4. **HR round:** Much simpler than the previous round. If one reaches till the HR, this means that the company is quite serious about your recruitment, although you can never be a 100% sure. Typical questions can be expected like why Samsung, what are your technical interests and hobbies, background, your engineering life in short, etc. They also tell you about their confidentiality policies and patenting that Samsung is known for.

Sources of Preparation

1. Geeksforgeeks Samsung archives
2. Interviewbit
3. Geeksforgeeks-Operating Systems, DSA



Courses and Certification

Operating Systems, Object Oriented Programming, Discrete Structures for Comp Science. I had not done DSA as a course but not required, knowledge of the subject would suffice. Knowledge of Comp Arch is also an asset, but I did not have knowledge of Comp Arch.

Other Relevant Information

For the research profile, a high CGPA is considered favorable to them (in the range of 9-9.5 gives you a good edge). Projects are very important for this profile and more importantly knowledge about these projects. Internships in reputed companies and universities which offer projects in cutting edge areas of research and technology are a major plus. I had internships at IISc, Bangalore and Brown University and a SOP at CEERI, Pilani. This experience is valued by them I suppose.

Sector: IT



Name: Deep Vyas (2014A7PS248P)

Company: Samsung Research Institute, Bangalore

Profile: Research Engineer

Recruitment Procedure:

- Online Test, 2 Technical Rounds, HR
- Test has 1 question to be solved in 3 hours.
- Test is generally easy. Mostly the questions are based on backtracking or simple graph algorithms.
- Interviews:
 1. One round consisting of simple algorithm questions and a few questions on basic concepts of OS and Databases.
 2. Second round consists of questions on projects mentioned in resume and the corresponding topics that might arise from discussion.
- The interviewer is more concerned towards the depth of your knowledge mentioned in your resume. Be confident of all that you mention and read in-depth about your project, especially if it is in the field of Machine Learning/ Artificial Intelligence. Many questions in some way or other involve knowledge of OS, Computer Architecture. So brushing them up is beneficial.

Sources of Preparation

Practise basic backtracking problems from various online sources for the code test. Interview questions are mostly based on applying things learnt in the courses.

Courses and Certification

OS, Databases and Computer Architecture are courses to be revised for Samsung. But expect questions from all courses(CDCs) and electives mentioned in the resume.

Other Relevant Information

Try to avoid taking the interviewer in the direction of questions on topics you are not confident of. It is all about creating a positive impression on the interviewer. If you are in grasp of concepts used in your projects it goes to your advantage. Also if Machine Learning project is mentioned on your resume be sure to master it, it will give a positive edge.

Sector: IT



Name: Nikita Sahasrabuddhe (2014A8PS447P)

Company: Samsung Bangalore

Profile: Software Developer

Recruitment Procedure:

- There was a coding test (majorly focused on graph traversal, DP) .
- On clearing this, there were 2 technical interview rounds and finally Hr round.
- For technical interviews, focus on DSA, OS and OOP concepts.
- They review the resume in a great detail, know everything mentioned on your resume.
- Concepts in OS were asked in depth.
- Standard DSA questions on trees, backtracking, DP.

Sources of Preparation

Interviewbit , geeksforgeeks.

Courses and Certification

DSA , OS , OOP , DBMS

Other Relevant Information

Might ask a few computer architecture questions. Difficulty of test is moderate.

If you are a EEE or Eni student, have a good answer for why IT sector job. (for other companies as well)

Sector: IT



Name: Shivam Gupta (2014A7PS066P)

Company: NUTANIX

Profile: Member of Technical Staff

Recruitment Procedure

- **Online coding round** on hackerrank platform (16 students shortlisted).
- **Group Fly Round** – It was a knockout round wherein we were given 3 code snippets each having some logical errors and were expected to correct those errors in 25 mins (8 students shortlisted for further rounds).
- **3 Technical Interviews**
 - 1. First Round**
 - General discussion on projects.
 - One coding question – Given a set of points in a plane, find the perimeter of the smallest fencing around all the points.
 - 2. Second Round**
 - This round was completely based on a single design question. Design paytm system.
 - 3. Third Round**
 - Discussion on my projects, some questions from Computer Networks, DBMS, OS scheduling algorithms, SQL query.
 - <http://www.geeksforgeeks.org/inplace-rotate-square-matrix-by-90-degrees/>
 - Asked to implement Factory method pattern.

Sources of Preparation

- Practice each and every question from interviewbit.
- Company specific practice from practice.geeksforgeeks.org
- Lecture slides for OOP, OS, DBMS, Computer Networks, DSA

Courses and Certification

- Be clear with your concepts in OOP, OS, DBMS, Computer Networks, DSA.
- Good understanding of design patterns is very important. One of my entire interviews was based on this.

Other Relevant Information

- Go through interview experience from [geeksforgeeks](http://www.geeksforgeeks.org) for the company you are sitting for at least a day before interview.

Sector: IT



Name: Pryanshu Arora(2013B4A7601P)

Company: Nutanix

Profile: Member Of technical staff

Recruitment Procedure

- There was an online test ,a debugging round and 3 interview round
- The online test had 2 questions .
- First question was to find k nearest points to the origin given a set of n points on the 2D plane .Where $k \leq 10000$ and $n \leq 10^7$.Expected complexity $O(n \log k)$.
- For the interview process 16 students were selected .
- There was a debugging round after the coding round . 3 codes were given with no explanation . Expected outputs were given and the code had to modified so as to achieve the desired output . The codes has OS related concepts in C also ex mutex and semaphores.
- 8 students were shortlisted after the debugging round for the interview process.
- In the first round an algorithmic question was asked.Given a set of villages on a map , a fence has to be made so as all the villages are covered but least wood is required to build the fence . Basically convex hull of the given points was needed to be found .
- I first gave an $O(n^2)$ solution but the interviewer required an $O(n \log n)$ solution for convex hull.
- For the 2nd interview 2 algorithm question were asked and a design problem was asked.
- There was a 3rd interview for the once they were not sure of whether to hire or not.

Sources of Preparation

- InterviewBit , GeeksforGeeks , OOP design patterns from tutorialpoint

Courses and Certification

- No courses as such but a good grip over algorithms is needed .

Other Relevant Information

- The interviewrs always ask the language you are proficient in.It does not matter on which language the company works.Its the programming proficiocy they want to check .



Sector: IT

Name: Tarun Bedi (2014A8PS446P)

Company: Myntra, Bangalore

Profile: Associate

Recruitment Procedure

1. **Coding Test:** As the first round, there was an 2 hour online test containing 5 aptitude questions of 4 points each, and 3 coding questions of 50 points each. The overall level of the test was moderate, aptitude was pretty easy. People who solved two or more coding questions were shortlisted.
2. **Technical Interviews:** 3 Technical Interviews were conducted for all shortlisted candidates. The interviews were heavily resume based, and the interviewer is very likely to ask in depth specific questions from your projects and internships. Two rounds were on algorithms and data structures in general, and one round was a design problem. Familiarity with DSA and Databases is vital.
3. **HR Interview:** They repeatedly asked questions like “Why Myntra?”, “Why not MBA” questions. General questions like family background and hobbies too. Having a good knowledge of the job profile in general, and where you would fit in to add value should be enough here.

Sources of Preparation

Cracking the Coding Interview, InterviewBit. Familiarity with Databases, by a campus/online course.

Courses and Certification

Did Databases as an elective in my 3-2. Prior experience in Android development also helped a bit.

Other Relevant Information

Myntra’s process, unlike most processes, really try to understand your thinking process and how you approach a problem, rather than theoretical knowledge from courses. Just be thorough with DSA/Database basics, and have a crystal clear idea of your resume.



Sector: IT

Name: Loveperteek Singh (2013B3A7496P)

Company: Myntra

Profile: Software Engineer (Jr. Data Scientist)

Recruitment Procedure

- Online Coding Test (Moderate level).
- Three technical Interviews –
 1. All three had mix of questions from Data Structures, Algorithms, Database Systems and a significant portion from Machine Learning.
 2. Questions ranged from easy to tough in terms of difficulty.
 3. Focus on projects was less and internships even lesser.
 4. Most of the time they checked command over subject knowledge.
 5. A mix of theoretical and practical questions was asked.
- One HR interview –
 1. Asked about family background, yourself and what do you really want yourself to be and why join Myntra.

Sources of Preparation

Most of my preparation for interviews was done during the revision of courses (which we do on campus) in my summer vacations.

Courses and Certification

I had done two online courses on Machine Learning and was in touch with current prevalent practices of machine learning. I think that helped me a lot.

Other Relevant Information

Be fully thorough with basic ML Algorithms and general DSA. Do some good ML projects.