References

Abdelrasoul Y., Saman A. B. S. H. and Sebastian P. (2016) 'A quantitative study of tuning ROS gmapping parameters and their effect on performing indoor 2D SLAM' 2nd IEEE Inter. Symposium on Robotics and Manufacturing Automation (ROMA), Ipoh, pp. 1-6, doi:10.1109/ROMA.2016.7847825

Ahmad N., Ghazilla R.A.R. and Khairi N. M. (2013) 'Reviews on various Inertial Measurement Unit (IMU) sensor applications' Inter. Jour. of Signal Processing Systems, Vol. 1, No. 2, pp. 256-262

Ahmed A. (2009). 'Object Detection and Tracking Using Kalman Filter and Fast Mean Shift Algorithm' In Proceedings of the Fourth Inter. Conf. on Computer Vision Theory and Applications, pp.585-589, doi:10.5220/0001787705850589

Ahmed H., Nizami M. H. A., Shah S. I. A. and Ayaz Y. (2018) 'Monocular Vision-Based Obstacle Detection Technique using Projected Grid Deformation', IEEE Inter. Conf. on Information and Automation (ICIA), Wuyishan, China, pp. 1599-1604

Ali N. H. and Hassan G. M. (2014) 'Kalman filter tracking' Inter. Jour. of Computer Applications, Vol. 89, No. 9, pp. 15-18

Alisher K., Alexander K. and Alexandr B. (2015) 'Control of the Mobile Robots with ROS in Robotics Courses', Procedia Engineering, Vol. 100, pp.1475-1484

Alonso L., Milanés V., Torre-ferrero C, Godoy J., Oria J. P. & Pedro T. D. (2011) 'Ultrasonic Sensors in Urban Traffic Driving-Aid Systems' Sensors, Vol. 11, No. 1, pp. 661-673, https://doi.org/10.3390/s110100661

Amin M. A. and Dzulkifli B. M. (2013), 'Features extraction for object detection based on interest point' TELKOMNIKA, Vol. 11, No. 5, pp. 2716-2722

Anish P., Saroj K., Krishna K. P. and Dayal R. P. (2016) 'Mobile robot navigation in unknown static environments using ANFIS controller' Perspectives in Science, Vol. 8, pp. 421-423, https://doi.org/10.1016/ j.pisc.2016. 04.094

Apoorva, Gautam R. and Kala R. (2018) 'Motion Planning for a Chain of Mobile Robots Using A* and Potential Field' Robotics, Vol. 7, No. 2, pp. 1-20, https://doi.org/10.3390/robotics7020020

Aqel M.O.A., Marhaban M. H., Saripan M. I. and Ismail N. B. (2016) 'Review of visual odometry: types, approaches, challenges, and applications' SpringerPlus, Vol. 5, No. 1897, pp. 1-26, https://doi.org/10.1186/ s40064-016-3573-7

Arturo G., Oscar R., Monica B., Miguel J. and Luis P. (2010) 'Estimation of visual maps with a robot network equipped with vision sensors' Sensors 2010, Vol. 10, pp. 5209-5232, doi:10.3390/s100505209

Arvanitakis I., Giannousakis K. and Tzes A. (2016) 'Mobile robot navigation in unknown environment based on exploration principles' IEEE Conf. on Control Applications (CCA), Buenos Aires, pp. 493-498, doi:10.1109/CCA. 2016.7587878.

Astua C., Barber R., Crespo J. and Jardon A. (2014) 'Object Detection Techniques Applied on Mobile Robot Semantic Navigation' Sensors, Vol. 14, pp. 6734-6757, doi:10.3390/s140406734

Ayadi N., Derbel N., Morette N., Novales C. and Poisson G. (2018) 'Simulation and experimental evaluation of the EKF simultaneous localization and mapping algorithm on the wifibot mobile robot' Journal of Artificial Intelligence and Soft Computing Research, Vol. 8, No. 2, pp. 91-101

Azab, M. M., Shedeed, H. A. and Hussein, A. S. (2010) 'A new technique for background modeling and subtraction for motion detection in real-time videos' IEEE Inter. Conf. on Image Processing (ICIP), pp. 3453-3456

Bagherpoura, P., Cheraghia S. A. and Mokjia M. B. M. (2012) 'Upper body tracking using KLT and Kalman filter' Proceedings of the International Neural Network Society Winter Conference, pp. 185-191

Bailer W., Fassold H., Lee F. & Rosner J. (2010) 'Tracking and Clustering Salient Features in Image Sequences' IEEE Computer Society, Conf. on Visual Media Production, pp. 17-24

Barnes B., Abeywardena D., Kodagoda S. & Dissanayake G. (2014) 'Evaluation of Feature Detectors for KLT based Feature Tracking using the Odroid U3' Proceedings of Australasian Conf. on Robotics and Automation, The University of Melbourne, Melbourne, Australia, pp. 1-9

Baslan N., Heerklotz S., Weber S., Heerklotz A., Höfig B. and Abu-Khalaf J. (2018) 'Navigation and Vision System of a Mobile Robot' 19th Inter. Conf. on Research and Education in Mechatronics (REM), Delft, pp. 99-104, doi:10.1109/REM.2018.8421777.

Batalin M. A., Sukhatme G. S. and Hattig M. (2004) 'Mobile robot navigation using a sensor network' IEEE Inter. Conf. on Robotics and Automation Proceedings, ICRA'04, New Orleans, LA, USA, Vol. 1, pp. 636-641, doi:10.1109/ROBOT. 2004.1307220

Bay H., Tuytelaars T. and Van G. L. (2006) 'SURF: Speeded Up Robust Features' Computer Vision-ECCV 2006. Lecture Notes in Computer Science, Springer, Vol. 3951. pp. 404-417, https://doi.org/10.1007/11744023_32

Benet G., Blanes F., Simó J.E. and Pérez P. (2002) 'Using infrared sensors for distance measurement in mobile robots' Robotics and Autonomous Systems, Vol. 40, No. 4, pp. 255-266

Berenson D., Kuffner J. and Choset H. (2008) 'An optimization approach to planning for mobile manipulation' IEEE Inter. Conf. on Robotics and Automation, Pasadena, CA, pp. 1187-1192

Bersan D., Martins R., Campos M. and Nascimento E. R. (2018) 'Semantic Map Augmentation for Robot Navigation: A Learning Approach Based on Visual and Depth Data' Latin American Robotic Symposium, 2018 Brazilian Symposium on Robotics (SBR) and 2018 Workshop on Robotics in Education (WRE), Joao Pessoa, pp. 45-50, doi:10.1109/LARS/SBR/ WRE.2018.00018

Bineesh T. R. and Simon P. (2012) 'Fast Pedestrian Detection using Smart ROI separation and Integral image based Feature Extraction' Inter. Jour. on Computer Science and Engineering (IJCSE), Vol. 4, pp. 1771-1779

Bradski G. and Kaehler A. (2008) 'Learning OpenCV Computer Vision with the OpenCV Library', O'Reilly Media

Buiu C. (2008) 'Design and development of a waste cleanup service robot' First International EUROBOT Conference, Heidelberg, pp. 194-202

Casanova O. L., Alfissima F. and Machaca F. Y. (2008) 'Robot Position Tracking Using Kalman Filter' Proceedings of the World Congress on Engineering, London, UK, pp. 1604-1608

Chang C., Siagian C. and Itti L. (2012) 'Mobile robot monocular vision navigation based on road region and boundary estimation' IEEE/RSJ Inter. Conf. on Intelligent Robots and Systems, pp. 1043-1050, doi:10.1109/IROS.2012. 6385703

Chaochao C. and Paul R. (2012) 'Mobile robot obstacle avoidance using short memory: a dynamic recurrent neuro-fuzzy approach' Transactions of the Institute of Measurement and Control, Vol. 34, pp. 148-164, doi:10.1177/0 142331210366642

Chatterjee A., Rakshit A. and Singh N. N. (2013) 'Mobile Robot Navigation' In: Vision Based Autonomous Robot Navigation, Studies in Computational Intelligence, Springer, Berlin, Heidelberg, Vol. 455, pp. 1-20, https://doi.org/ 10.1007/978-3-642-33965-3_1

Chen S. Y. (2012) 'Kalman Filter for Robot Vision: A Survey' IEEE Transactions on Industrial Electronics, Vol. 59, No. 11, pp. 4409-4420, doi:10.1109/TIE.2011. 2162714

Chen Y. and Zhang B. (2014) 'Surveillance video summarisation by jointly applying moving object detection and tracking' Inter. Jour. of Computational Vision and Robotics, Vol. 4, No. 3, pp. 212-234

Chengjian S., Songhao Z. and Jiawei L. (2015) 'Fusing Kalman filter with TLD algorithm for target tracking' 34th Chinese Control Conference (CCC), Hangzhou, pp. 3736-3741, doi:10.1109/ChiCC.2015.7260218

Chhotray A. and Parhi D. R. (2019) 'Navigational control analysis of two-wheeled self-balancing robot in an unknown terrain using back-propagation neural network integrated modified DAYANI approach' Robotica, Vol. 37, No. 8, pp.1346-1362, 10.1017/S0263574718001558

Choi K. and Lee S. (2010) 'Enhanced SLAM for a mobile robot using extended Kalman Filter and neural networks' Inter. Jour. Precis. Eng. Manuf. Vol. 11, pp. 255-264, https://doi.org/10.1007/s12541-010-0029-9

Chong T .J., Tang X. J., Leng C. H., Yogeswaran M., Ng O. E. and Chong Y. Z. (2015) 'Sensor Technologies and Simultaneous Localization and Mapping (SLAM)' Procedia Computer Science, Vol. 76, pp.174-179

Chu K., Lee M. and Sunwoo M. (2012) 'Local Path Planning for Off-Road Autonomous Driving With Avoidance of Static Obstacles' IEEE Transactions on Intelligent Transportation Systems, Vol. 13, no. 4, pp. 1599-1616, doi:10.1109/TITS.2012.2198214.

Coito F., Eleutério A. and Valtchev S. (2014) 'Tracking a Mobile Robot Position Using Vision and Inertial Sensor' Doctoral Conference on Computing, Electrical and Industrial Systems, IFIPAICT, Vol. 423, pp. 201-208

Cong T. H., Kim Y.J. and Lim M.-T. (2008) 'Hybrid Extended Kalman Filter-based localization with a highly accurate odometry model of a mobile robot' Inter. Conf. on Control, Automation and Systems, Seoul, pp. 738-743, doi:10.1109/ICCAS.2008.4694596.

Cormen T.H. (2009) 'Data Structures for Disjoint Sets' In Introduction to Algorithms: The MIT Press, pp. 498-501

Courbon J., Mezouar Y., Eckt L. & Martinet P. (2007) 'A generic fisheye camera model for robotic applications' 2007 IEEE/RSJ International Conference on Intelligent Robots and Systems, San Diego, CA, pp. 1683-1688, doi:10.1109/IROS.2007.4399233.

Cousins S. (2010) 'Welcome to ROS Topics' IEEE Robotics & Automation Magazine, Vol. 17, No. 1, pp. 13-14, doi:10.1109/MRA.2010.935808

Culler D. & Long J. (2016) 'A Prototype Smart Materials Warehouse Application Implemented using Custom Mobile Robots and Open Source Vision

Technology Developed using EmguCV' 44th North American Manuf. Research Conf., NAMRC 44, Blacksburg, Virginia, United States, pp. 1092-1106

Dabit Industries (2017) 'kobuki Documentation Release 2.0', pp. 1-43

Dalal N. & Triggs B. (2005) 'Histograms of oriented gradients for human detection' IEEE Computer Society Conference on Computer Vision and Pattern Recognition (CVPR'05), San Diego, CA, USA, Vol. 1, pp. 886-893, doi:10.1109/CVPR.2005.177

Dalla V.K. & Pathak P.M. (2015) 'Trajectory tracking control of a group of cooperative planar space robot systems' Proceedings of the Institution of Mechanical Engineers, Part I: Journal of Systems and Control Engineering. Vol. 229, No. 10, pp. 885-901, doi: 10.1177/0959651815605016

Dao N. X., Bum-Jae Y. & Sang-Rok O. (2005) 'Visual navigation for indoor mobile robots using a single camera' IEEE/RSJ Inter. Conf. on Intelligent Robots and Systems, Edmonton, Alta., pp. 1992-1997, doi:10.1109/IROS.2005. 1545494.

Das S. K., Dash S. & Rout B. K. (2019) 'An Integrative Approach for Tracking of Mobile Robot with Vision Sensor' Inter. Jour. Computational Vision and Robotics, Vol. 9, Issue 2, pp. 111-131

Das S. K., Dash S. & Rout B. K. (2020) 'Development of a Shape Aware Path Planning Algorithm for a Mobile Robot' Inter. Conf. on Emerging Trends in Communication, Control and Computing (ICONC3 2020), Mody University Laxamangarh, India, pp. 1-7

Davison A. J. (2007) 'Vision-Based SLAM in Real-Time' Pattern Recognition and Image Analysis, Lecture Notes in Computer Science, Vol. 4477. pp. 1-4, https://doi.org/10.1007/978-3-540-72847-4_3

Dayoub F., Morris T., Upcroft B. & Corke P. (2013) 'Vision-only autonomous navigation using topometric maps' IEEE/RSJ Inter. Conf. on Intelligent Robots and Systems, Tokyo, pp. 1923-1929

Deng Z., Gao Y., Mao L., Li Y. & Hao G. 'New approach to information fusion steady-state Kalman filtering' Automatica (Jour. of IFAC), Vol. 41, No. 10, pp. 1695-1707, https://doi.org/10.1016/j.automatica.2005.04.020

Deori B. & Thounaojam D.M. (2014) 'A Survey on Moving Object Tracking in Video' Inter. Jour. on Information Theory, Vol. 3, No. 3, pp. 1-16

Dhanachandra N., Manglem K. & Chanu Y. J. (2015) 'Image Segmentation using K-means Clustering Algorithm and Subtractive Clustering Algorithm' 11th Inter. Multi-conf. on Information Processing (IMCIP), pp. 764-771

Dinh H. & Inanc T. (2009) 'Low cost mobile robotics experiment with camera and sonar sensors' American Control Conference, St. Louis, pp. 3793-3798, doi:10.1109/ACC.2009.5160449

Dong L. & Lin X. (2010) 'Monocular-Vision-Based Study on Moving Object Detection and Tracking' IEEE 4th Inter. Conf. on New Trends in Information Science and Service Science, Gyeongju, South Korea, pp. 692-695

Duchoň F., Babinec A., Kajan M., Beňo P., Florek M., Fico T. & Jurišica L. (2014) 'Path Planning with modified A star algorithm for a mobile robot' Procedia Engineering, Vol. 96, pp. 59-69

Ehsan S., Clark A. F., Rehman N. U. & McDonald-Maier K. D. (2015) 'Integral Images: Efficient Algorithms for Their Computation and Storage in Resource-Constrained Embedded Vision Systems' Sensors-2015, Vol. 15, No. 7, pp.1-27, doi:10.3390/s150716804

ElHalawany B. M., Abdel-Kader H. M., TagEldeen A., Ahmed A. E. S. & Nossair Z. B. (2012) 'Vision-based obstacles detection for a mobile robot' 8th International Conference on Informatics and Systems (INFOS), Cairo, pp. 1-7

Elham K. & Davud A. (2014) 'A robust adaptive algorithm of moving object detection for video surveillance' EURASIP Jour. on Image and Video Processing 2014, pp.1-9, http://jivp.eurasipjournals.com/content/2014/1/27

Estefo P., Simmonds J., Robbes R. & Fabry J. (2019) 'The Robot Operating System: Package reuse and community dynamics' Jour. of Systems and Software, Vol. 151, pp. 226-242, https://doi.org/10.1016/j.jss.2019.02.024

Fakharian A., Gustafsson T. & Mehrfam M. (2011) 'Adaptive Kalman filtering based navigation: An IMU/GPS integration approach' Inter. Conf. on Networking, Sensing and Control, pp. 181-185, doi: 10.1109/ICNSC.2011.5874871

Felzenszwal P., Girshick R., McAllester D. & Ramanan D. (2010) 'Object Detection with Discriminatively Trained Part Based Models' IEEE Transactions on Pattern Analysis and Machine Intelligence, Vol. 32, No. 9, pp. 1627-1645

Ferreira B. Q., Grine M., Garneiro D., Costeira J. P. & Santos B. S. (2014) 'VOLUMNECT: measuring volumes with Kinect' Proc. SPIE 9013, Three-Dimensional Image Processing, Measurement (3DPIM) and Applications, International Society for Optics and Photonics, Vol. 9013, pp. 1-9

Fu H., Cao X. & Tu Z. (2013) 'Cluster-Based Co-Saliency Detection' IEEE Transactions on Image Processing, Vol. 22, No. 10, pp. 3766-3778

Fu Z. & Han Y. (2012) 'Centroid weighted Kalman filter for visual object tracking' Measurement, Vol. 45, No. 4, pp. 650-655, https://doi.org/10.1016/j.measurement.2012.01.004

Galli M., Barber R., Garrido S. & Moreno L. (2017) 'Path planning using Matlab-ROS integration applied to mobile robots' IEEE Inter. Conf. on Autonomous Robot Systems and Competitions (ICARSC), Portugal, pp. 98-103

Ganganath N. & Leung H. (2012) 'Mobile robot localization using odometry and kinect sensor' IEEE Inter. Conf. on Emerging Signal Processing Applications, Las Vegas, NV, pp. 91-94, doi:10.1109/ESPA.2012.6152453

Gatesichapakorn S., Takamatsu J. & Ruchanurucks M. (2019) 'ROS based Autonomous Mobile Robot Navigation using 2D LiDAR and RGB-D Camera' First Inter. Symposium on Instrumentation, Control, Artificial Intelligence, and Robotics (ICA-SYMP), Bangkok, Thailand, pp. 151-154

Gavrilut A. Gacsadi C. G. & Tiponut V. (2006) 'Vision based algorithm for path planning of a mobile robot by using cellular neural networks' IEEE Inter. Conf. on Automation, Quality and Testing, Robotics, Cluj-Napoca, pp. 306-311

Geiger A., Lenz P., Stiller C. & Urtasun R. (2013), 'Vision meets robotics: The kitti dataset' Inter. Jour. of Robotics Research, Vol. 32, No. 11, pp. 1231-1237

Gene E. J., Ki Y. C. & Ian P. (2008) 'Optimal Path Planning for Mobile Robot Navigation' IEEE/ASME transactions on mechatronics, Vol. 13, No. 4, pp. 451-460

Ghandour M., Liu H., Stoll N. & Thurow K. (2015) 'Improving the Navigation of Indoor Mobile Robots Using Kalman Filter' IEEE Inter. Instrumentation and Measurement Technology Conference (I2MTC), Pisa, Italy, pp. 1434-1439

Gochev K., Safonova A. & Likhachev M. (2012) 'Planning with adaptive dimensionality for mobile manipulation' IEEE Inter. Conf. on Robotics and Automation, Saint Paul, MN, pp. 2944-2951

Gorostiza E. M., Galilea J. L., Meca F. J. M., Monzú D. S., Zapata F. E. & Puerto L. P. (2011) 'Infrared Sensor System for Mobile-Robot Positioning in Intelligent Spaces' Sensors, Vol. 11, pp. 5416-5438, doi:10.3390/s110505416

Goyal J. K. & Nagla K. S. (2014) 'A new approach of path planning for mobile robots' International Conference on Advances in Computing, Communications and Informatics (ICACCI), New Delhi, pp. 863-867

Guennouni S., Ahaitouf A. & Mansouri A. (2005) 'A Comparative Study of Multiple Object Detection Using Haar-Like Feature Selection and Local Binary Patterns in Several Platforms' Hindawi Publishing Corporation Modelling and Simulation in Engineering, Vol. 2015, No. 948960, pp. 1-9

Gunjal P.R., Gunjal B.R., Shinde H.A., Vanam S.M. & Aher S.S. (2018) 'Moving Object Tracking Using Kalman Filter' Inter. Conf. On Advances in

Communication and Computing Technology (ICACCT), pp. 544-547, doi: 10.1109/ICACCT.2018.8529402

Guo J., Su K., Wu C. & Shiau S. (2009) 'Motion planning for mobile robots using a laser range finder' Artif Life Robotics, Vol. 14, pp. 257-261, https://doi.org/10.1007/s10015-009-0666-1

Guo L., Liaoa Y., Luob D. & Liaoa H.(2012) 'Generic Object Detection Using Improved Gentleboost Classifier' Physics Procedia Vol. 25(2012), pp. 1528-1535, doi:10.1016 /j.phpro.2012.03.272

Gupta M., Behera L., Subramanian V. K. & Jamshidi M. M. (2015) 'A Robust Visual Human Detection Approach With UKF-Based Motion Tracking for a Mobile Robot' IEEE Systems Journal, Vol. 9, No. 4, pp. 1363-1375

Guruji A. K., Agarwal H. & Parsediya D. K. (2016) 'Time-Efficient A* Algorithm for Robot Path Planning' 3rd International Conference on Innovations in Automation and Mechatronics Engineering ICIAME, Vol. 23, pp. 144–149

Güzel M. S. (2013) 'Autonomous Vehicle Navigation Using Vision and Mapless Strategies: A Survey' Hindawi Publishing Corporation, Advances in Mechanical Engineering, Vol. 2013, No. 234747, pp. 1-10

Ha E. & Park K. (2010) 'Kalman filtering in position control using a vision sensor' IEEE Int. Conf. on Control, Automation and Systems (ICCAS), Gyeonggi-do, pp.1252-1254, doi:10.1109/ICCAS.2010.5669719

Habib M. K. (2007) 'Real Time Mapping and Dynamic Navigation for Mobile Robots' Inter. Jour. of Advanced Robotic Systems, pp. 323-338

Haifeng Z. & Xiaoqun P. (2013) 'Research on Target Tracking Based on TLD Algorithm' Applied Mechanics and Materials, Trans Tech Publications, Vol. 389, pp. 819-822, doi:10.4028/www.scientific.net/AMM.389.819

Hamel W. R. & Kress R. L. (2001) 'Elements of telerobotics necessary for waste clean-up automation' Proceedings 2001 ICRA, IEEE Inter. Conf. on Robotics and Automation (Cat No. 01ch37164), Vol. 1, pp. 393-400

Han-ye Z., Wei-ming L. & Ai-xia C. (2018) 'Path Planning for the Mobile Robot: A Review' Symmetry 2018, Vol. 10, No. 10, pp. 1-17

Hashmi M.F., Pal R., Saxena R. & Keskar A.G. (2016) 'A New Approach for Real Time Object Detection and Tracking on High Resolution and Multi-Camera Surveillance Videos using GPU' Central South University Press and Springer-Verlag, Berlin Heidelberg, pp. 130-144

Haythem G., Moncef T. & René Z. (2011) 'Robot Navigation Map Building Using Stereo Vision Based 3D Occupancy Grid' Jour. of Artificial Intelligence: Theory and Application (JAITA), HyperSciences, Vol. 1, No. 3, pp. 63-72

Hebert M. (2000) 'Active and passive range sensing for robotics' IEEE Inter. Conf. on Robotics and Automation, Symposia Proceedings (Cat No. 00CH37065), Vol. 1, pp. 102-110, doi:10.1109/ROBOT.2000.844046

Hu J., Hu S. & Sun Z. (2013) 'A real time dual-camera surveillance system based on tracking-learning-detection algorithm' IEEE 25th Chinese Control and Decision Conference (CCDC), Guiyang, pp. 886-891, doi:10.1109/CCDC.2013.6561048

Huang P., Zhang F., Cai J., Wang D., Meng Z. & Guo J. (2017) 'Dexterous Tethered Space Robot: Design, Measurement, Control, and Experiment' IEEE Transactions on Aerospace and Electronic Systems, Vol. 53, No. 3, pp. 1452-1468, doi:10.1109/TAES.2017.2671558

Hwang S. & Song J. (2011) 'Monocular Vision-Based SLAM in Indoor Environment Using Corner, Lamp, and Door Features From Upward-Looking Camera' IEEE Transactions on Industrial Electronics, Vol. 58, No. 10, pp. 4804-4812

Ignatiev M. B., Vladimirov S. V. & Sergeev M. B. (2016) 'Walking robots challenges and prospects' Innovation and expertise, Vol. 2, No. 17, pp. 131-132

Imen C., Anis K., Hachemi B., Adel A., Maram A. & Habib Y. (2017) 'Design and performance analysis of global path planning techniques for autonomous mobile robots in grid environments' Inter. Jour. of Advanced Robotic Systems, pp. 1-15, doi:10.1177/1729881416663663

Janabi-Sharifi F. & Marey M. (2010) 'A Kalman-Filter-Based Method for Pose Estimation in Visual Servoing' IEEE Transactions on Robotics, Vol. 26, No. 5, pp. 939-947, doi:10.1109/TRO.2010.2061290

Jawas, N. & Suciati, N. (2013) 'Image Inpainting using Erosion and Dilation Operation' Inter. Jour. of Advanced Science and Technology, Vol. 51, pp. 127-134

Jeon S., Tomizuka M. & Katou T. (2009) 'Kinematic Kalman Filter (KKF) for Robot End-Effector Sensing' ASME Journal of Dynamic Systems, Measurement and Control, Vol. 131, No. 2, pp. 1-8, https://doi.org/10.1115/ 1.3023124

Jung B. & Sukhatme G. S. (2010) 'Real-time Motion Tracking from a Mobile Robot' Springer, Inter. Jour. of Social Robotics, Vol. 2, pp. 63-78

Jung J., Park J., Kang T., Kang J. & Kang H. (2020) 'Mobile Robot Path Planning Using a Laser Range Finder for Environments with Transparent Obstacles' Applied Sciences, Vol. 10, No. 8, pp. 1-22

Kaehler A. & Bradksi G. (2016) 'Contours' in Learning OpenCV 3: Computer Vision in C++: O'Reilly Media, Inc., pp. 1-407

Kalal Z., Mikolajczy K. & Matas J. (2010) 'Tracking-Learning-Detection' IEEE Transactions On Pattern Analysis And Machine Intelligence, Vol. 6, No. 1, pp. 1-14

Kamarudin K., Mamduh S. M., MdShakaff A. Y. & Zakaria A. (2014) 'Performance analysis of the Microsoft Kinect sensor for 2D simultaneous localization and mapping (SLAM) techniques' Sensors, Vol. 14, No. 12, pp. 1-14

Kanellakis C. & Nikolakopoulos G. (2017) 'Survey on Computer Vision for UAVs: Current Developments and Trends' Jour. of Intelligent & Robotic Systems, Vol. 87, pp. 141-168, 10.1007/s10846-017-0483-z

Khondker R. H., Azzama T. & Ehtesanul I. A. K. M. (2018) 'Implementation of Fuzzy Aided Kalman Filter for Tracking a Moving Object in Two-Dimensional Space' Inter. Jour. of Fuzzy Logic and Intelligent Systems, Vol. 18, No. 2, pp. 85-96

Kim D. & Kwon J. (2016) 'Moving Object Detection on a Vehicle Mounted Back-Up Camera' Sensors, Vol. 16, No. 23, pp. 1-10

Kim P. G., Park C.G., Jong Y. H., Yun J. h., Mo E. J., Kim C. S., Jie M. S., Hwang S. C. & Lee K. W. (2007) 'Obstacle Avoidance of a Mobile Robot Using Vision System and Ultrasonic Sensor' Advanced Intelligent Computing Theories and Applications, With Aspects of Theoretical and Methodological Issues, Lecture Notes in Computer Science, Springer, Berlin, Heidelberg, Vol. 4681, pp. 543-553

Koenig S. & Likhachev M. (2002) 'D* Lite' In AAAI/IAAI, pp. 476–483

Koenig S. & Sun X. (2009) 'Comparing real-time and incremental heuristic search for real-time situated agents' Autonomous Agents and Multi-Agent Systems, Vol. 18, pp. 313–341, https://doi.org/10.1007/s10458-008-9061-x

Koenig S., Likhachev M. & Furcy D. (2004) 'Lifelong Planning A*' Artificial Intelligence, Vol. 155, pp. 93-146

Koi H. J. and Kim J. H. (2013) 'Map building and path generation for Indoor mobile robot by using global and local views' IEEE 13th Inter. Conf. on Control, Automation and Systems, pp. 1243-1246

Komatsu R., Fujii H. & Tamura Y. (2020) 'Free viewpoint image generation system using fisheye cameras and a laser rangefinder for indoor robot teleoperation' ROBOMECH Journal, Vol. 7, No. 15, pp. 1-10, https://doi.org/10.1186/s40648-020-00163-4

Kryjak T. & Gorgoń M. (2011) 'Real-Time Implementation of Moving Object Detection in Video Surveillance Systems using FPGA' Computer Science, Vol. 12, pp. 150-162

Labbe M. & Michaud F. (2014) 'Online global loop closure detection for large-scale multi-session graph based SLAM' IEEE/RSJ Inter. Conf. on Intelligent Robots and Systems, Chicago, IL, USA, pp. 2661-2666

Lam T. & Xu Y. T. (2012). 'Climbing Robot: Design, Kinematics and Motion Planning' New York: Springer Heidelberg; pp. 1-12

Lan A. T., Nguyen D. T., Dang V. H. & Tran C. H. (2015) 'Sequential Multidimensional Scaling with Kalman Filtering for Location Tracking' Inter. Jour. of Distributed Sensor Networks, Vol. 11, No. 584912, pp. 1-9, http://dx.doi.org/10.1155/2015/584912

Lee K., Lee C., Kim S. & Kim Y. (2012) 'Fast object detection based on color histograms and local binary patterns' IEEE Region 10 Conference (TENCON), pp. 1-4, doi:10.1109/TENCON.2012.6412323

Li X., Wang K., Wang W. & Li Y. (2010) 'A Multiple Object Method Using Kalman filter' IEEE Inter. Conf. on Information and Automation, Harbin, China, pp. 1862-1866

Li Y. & Birchfield S. T. (2010) 'Image-Based Segmentation of Indoor Corridor Floors for a Mobile Robot' IEEE/RSJ Inter. Conf. on Intelligent Robots and Systems, Taipei, Taiwan, pp. 837-843

Lin C.H., Jiang S.Y., Pu Y.J. & Song K.T. (2010) 'Robust Ground Plane Detection for Obstacle Avoidance of Mobile Robots Using a Monocular Camera' Proceedings of the IEEE/RSJ Inter. Conf. on Intelligent Robots and Systems, Taipei, Taiwan, pp. 3706-3711

Lingelbach F. (2004) 'Path planning for mobile manipulation using probabilistic cell decomposition' IEEE/RSJ Inter. Conf. on Intelligent Robots and Systems (IROS) (IEEE Cat. No. 04CH37566), Vol. 3, pp. 2807-2812

Luo B., Hao K., Ding Y. & Liu J. (2015) 'Research on Mobile Robot Path Tracking Based on Color Vision' Chinese Automation Congress (CAC), Wuhan, China, pp. 371-375

Luo R. C., Wang P. K., Tseng Y. F. & Lin T. Y. (2006), 'Navigation and Mobile Security System of Home Security Robot' IEEE Inter. Conf. on Systems, Man and Cybernetics, pp. 169-174, doi:10.1109/ICSMC.2006.384377

Ma Y., Kim S., Oh D. & Cho Y. (2008) 'A study on development of home Mess-Cleanup Robot McBot' IEEE/ASME Inter. Conf. on Advanced Intelligent Mechatronics, Xian, pp. 114-119

Macias J. A. R. and Exposito A. G. (2006) 'Self-tuning of Kalman filters for harmonic computation' IEEE Transactions on Power Delivery, Vol. 21, No. 1, pp. 501-503, doi:10.1109/TPWRD.2005.860411

Magid E., Ozawa K., Tsubouchi T., Koyanagi E. & Yoshida T. (2008) 'Rescue Robot Navigation: Static Stability Estimation in Random Step Environment' Simulation, Modeling, and Programming for Autonomous Robots. Lecture Notes in Computer Science, Springer, Berlin, Heidelberg. Vol. 5325, pp. 305-316, https://doi.org/10.1007/978-3-540-89076-8_30

Mahadevi S., Shylaja K. R. & Ravinandan M. E. (2014) 'Memory Based A-star for Path Planning of a Mobile Robot' Inter. Jour. of Science and Research, Vol. 2, No. 6, pp. 1351-1355

Mane S. B. & Vhanale S. (2016) 'Real time obstacle detection for mobile robot navigation using stereo vision' Inter. Conf. on Computing, Analytics and Security Trends, Pune, pp. 637-642, doi:10.1109/CAST.2016. 7915045

Mathew R. & Hiremath S. S. (2016) 'Trajectory Tracking and Control of Differential Drive Robot for Predefined Regular Geometrical Path' Procedia Technology, Vol. 25, pp.1273-1280, doi.org/10.1016/j.protcy.2016.08.221

McCarthy C. & Barnes N. (2004) 'Performance of optical flow techniques for indoor navigation with a mobile robot' Proceedings of the 2004 IEEE Inter. Conf. on Robotics 8 Automation, New Orleans. LA, pp. 5093-5098

Miljković Z., Vuković N. & Mitić M. (2015) 'Neural extended Kalman filter for monocular slam in indoor environment' Proceedings of the Institution of Mechanical Engineers, Part C: Jour. of Mechanical Engineering Science, Vol. 230, No. 5, pp. 856-866

Moon S. S., Myeong C. K., Yong W. J., Young J. J., Bum J. L. (2013) 'Implementation of Context-Aware Based Robot Control System for Automatic Postal Logistics' Studies in Informatics and Control, Vol. 22, No. 1, pp.71-80.

Morlier J. & Michon G. (2010) 'Virtual Vibration Measurement Using KLT Motion Tracking Algorithm' Jour. of Dynamic Systems, Measurement & Control (ASME), Vol. 132, pp. 1-8

Moussakhani B., Flåm J. T., Ramstad T. A. & Balasingham I. (2014) 'On change detection in a Kalman filter based tracking problem' Signal processing, Vol. 105, pp. 268-276, doi.org/10.1016/j.sigpro.2014.05.028

Mozos O.M., Triebel R., Jensfelt P., Rottmann A. & Burgard W. (2007) 'Supervised semantic labeling of places using information extracted from sensor data' Robotics and Autonomous Systems, Vol. 55, No. 5, pp. 1-23

Mukhtar A. & Xia L. (2015) 'Vehicle Detection Techniques for Collision Avoidance Systems: A Review' IEEE transactions on intelligent transportation systems, Vol. 16, No. 5, pp. 2318-2338

Murat K., Orkan M. Ç. & Ömer P. (2017) 'Design of an autonomous mobile robot based on ROS' Inter. Artificial Intelligence and Data Processing Symposium (IDAP), Malatya, pp. 1-5, doi:10.1109/IDAP.2017.8090199

Nikdel P., Chen M. & Vaughan R. (2020) 'Recognizing and Tracking High-Level, Human-Meaningful Navigation Features of Occupancy Grid Maps' 17th Conference on Computer and Robot Vision (CRV), Ottawa, ON, Canada, pp. 62-69, [Online] doi:10.1109/CRV50864.2020.00017.

Ohnishi N. & Imiya A. (2013) 'Appearance-Based Navigation and Homing for Autonomous Mobile Robot' Elsevier, Image and Vision Computing, Vol. 31, No. 7, pp. 511-532

Ostovar A., Ringdahl O. & Hellström A. (2018) 'Adaptive Image Thresholding of Yellow Peppers for a Harvesting Robot' Robotics 2018, Vol. 7, No.1, pp. 1-16, https://doi.org/10.3390/robotics7010011

Pandey A., Kashyap A. K., Parhi D. R. & Patle B. (2019) 'Autonomous mobile robot navigation between static and dynamic obstacles using multiple ANFIS architecture' World Journal of Engineering, Vol. 16, No. 2, pp. 275-286, Emerald, [Online] 10.1108/WJE-03-2018-0092

Pandey K. & Parhi D. (2020) 'Trajectory Planning and the Target Search by the Mobile Robot in an Environment Using Behavior-Based Neural Network Approach' Robotica, Vol. 38 No. 9, pp. 1627-1641, doi:10.1017/S0263574719001668

Park E., Ju H., Jeong Y. M. and Min S. (2015) 'Tracking-Learning-Detection Adopted Unsupervised Learning Algorithm' Seventh Inter. Conf. on Knowledge and Systems Engineering (KSE), Ho Chi Minh City, pp. 234-237, doi:10.1109/KSE.2015.59

Park E., Ju H., Jeong Y. M. and Min S. (2015) 'Tracking-Learning-Detection Adopted Unsupervised Learning Algorithm' Seventh Inter. Conf. on Knowledge and Systems Engineering (KSE), Ho Chi Minh City, pp. 234-237, doi:10.1109/KSE.2015.59

Payá L., Gil A. & Reinoso O. (2017) 'A State-of-the-Art Review on Mapping and Localization of Mobile Robots Using Omnidirectional Vision Sensors' Jour. of Sensors, Vol. 2017, No. 3497650, pp. 1-21

Peleshko D. & Soroka K. (2013) 'Research of usage of Haar-like features and AdaBoost algorithm in Viola-Jones method of object detection' 12th Inter. Conf. on the Experience of Designing and Application of CAD Systems in Microelectronics (CADSM), Polyana, Svalyava, Ukraine, pp. 284-296

Peter S. S. (2015) 'Military Robotics: Latest Trends and Spatial Grasp Solutions' Inter. Jour. of Advanced Research in Artificial Intelligence (IJARAI), Vol. 4, No. 4, pp. 1-10

Phinni M. J., Sudheer A.P., RamaKrishna M. and Jemshid K.K. (2008) 'Obstacle Avoidance of a wheeled mobile robot: A Genetic-neuro fuzzy approach' IISc Centenary-Inter. Conf. on Advances in Mechanical Engineering (IC-ICAME), Bangalore, India, pp. 1-3

Potdar G. P. & Thool R. C. (2014) 'Comparison of Various Heuristic Search Techniques for Finding Shortest Path' Inter. Jour. of Artificial Intelligence & Applications (IJAIA), Vol. 5, No. 4, pp. 1-12

Puente G.-J. H., Martínez-Sánchez J. & Arias P. (2013) 'Review of mobile mapping and surveying technologies' Measurement, Vol. 46, No. 7, pp. 2127-2145, https:// doi.org/10.1016/j.measurement.2013.03.006

Qazizadaa M. E. & Pivarčiováa E. (2016) 'Mobile robot controlling possibilities of inertial navigation system' Procedia Engineering, Vol. 149, pp. 404-413, doi:10.1016/j.proeng.2016.06.685

Qi W., Li F. & Zhenzhong L. (2010) 'Review on Camera Calibration' IEEE Chinese Control and Decision Conference, Xuzhou, China, pp. 3354-3358

Qingchang G. & Qiao B. (2015) 'Research on the detection and tracking technology of moving object in video images' IEEE Inter. Conf. on Mechatronics and Automation IEEE, Beijing, China, pp. 469-473

Ramón B., Jonathan C., Clara G., Alejandra C. H. & Marina G. (2018) 'Mobile Robot Navigation in Indoor Environments: Geometric', Topological, and Semantic Navigation", pp. 1-25, http://dx.doi.org/10.5772/intechopen.79842

Ren Z., Gao S., Chia L. & Tsang I. W. (2014) 'Region-Based Saliency Detection and Its Application in Object Recognition' IEEE Transactions on Circuits and Systems for Video Technology, Vol. 24, No. 5, pp. 769-779

Riedel G. C. M. & Franchi A. (2012) 'ROS on Matlab' [Online] http://www.ros.org/wiki/groovy/Planning/Matlab

Rios L.H.O. & Chaimowicz L. (2010) 'A Survey and Classification of A* Based Best-First Heuristic Search Algorithms' Advances in Artificial Intelligence-SBIA 2010, Lecture Notes in Computer Science, Springer, Berlin, Heidelberg, Vol. 6404. pp. 253-262

Roland S. & Illah R. N. (2004) 'Introduction to Autonomous Mobile Robots' A Bradford Book, pp. 1-20, 151-163

ROS node for Turtle Bot robot, (accessed Nov 28, 2019). [Online] Available: https://github.com/jaedlund/me134_explorer

Sankowski W., Włodarczyk M., Kacperski D. & Grabowski K. (2017) 'Estimation of measurement uncertainty in stereo vision system' Image and Vision Computing, Vol. 61, pp. 70-81, [Online] https://doi.org/10.1016/j.imavis.2017.02.005

Saranya C., Unnikrishnan M., AkbarAli S., Sheela D.S. & Lalithambika V.R. (2016) 'Terrain Based D* Algorithm for Path Planning' IFAC-Papers OnLine, Vol. 49, No. 1, pp. 178-182, https://doi.org/10.1016/j.ifacol.2016.03.049

Sarra A., Taylor S., Riley I. & Gamble R. (2018) 'Predictive Path Planning Algorithm Using Kalman Filters and MTL Robustness' IEEE Inter. Symposium on Safety, Security and Rescue Robotics (SSRR), pp. 1-7. [Online] 10.1109/SSRR.2018.8468646

Scholz J., Levihn M., Isbell C. L., Christensen H. & Stilman M. (2015) 'Learning non-holonomic object models for mobile manipulation' IEEE Inter. Conf. on Robotics and Automation (ICRA), Seattle, WA, pp. 5531-5536, doi:10.1109/ICRA.2015.7139972

Schreiber M., Königshof H., Hellmund A. & Stiller C. (2016) 'Vehicle localization with tightly coupled GNSS and visual odometry' IEEE Intelligent Vehicles Symposium (IV), Gothenburg, pp. 858-863, doi:10.1109/IVS. 2016.7535488

Shaikh S.H., Saeed K. & Chaki N. (2014) 'Moving Object Detection using Background Subtraction' Springer Briefs in Computer Science book series, pp.15-23

Shan J. & Wang X. (2013) 'Experimental study on mobile robot navigation using stereo vision' IEEE Inter. Conf. on Robotics and Biomimetics (ROBIO), Shenzhen, pp. 1958-1965, doi:10.1109/ROBIO.2013.6739756.

Sharma D. & Dwivedy S. K. (2012) 'Design and Fabrication of an Autonomous Mobile Robot for Obstacle Avoidance and Path Planning in partially known Environment' Advanced Material Research, Vol. 403-408, pp. 3917-3924

Sharma P. & Suji J. (2016) 'A Review on Image Segmentation with its Clustering Techniques', Inter. Jour. of Signal Processing, Image Processing and Pattern Recognition, Vol.9, No.5, pp. 209-218

Shishira S., Roopalakshmi R., Sudarsan S.D. & Ash N. (2020) 'Industrial Automation: Case Study-Vision Based Live Object Monitoring System' Advances in Intelligent Systems and Computing, Vol. 1119, pp. 579-589

Shuai G., Qizhuo D. & Fengfeng X. (2017) 'Vision Based Navigation for Omni-directional Mobile Industrial Robot' Procedia Computer Science, Vol. 105, pp. 20-26, https://doi.org/10.1016/j.procs.2017.01.182

Simon D. (2006) 'Optimal State Estimation: Kalman, H Infinity, and Nonlinear Approaches' Oxford: John Wiley & Sons INC. Publication, pp.183-260

Somia B., Ouahiba A. & Malik L. (2019) 'Intelligent mobile robot navigation using a neuro-fuzzy approach' Inter. Jour. of Computer Aided Engineering and Technology, Vol. 11, No. 6, pp. 710-726, https://doi.org/10.1504/IJCAET.2019.102500

Souissi O., Benatitallah R., Duvivier D., Artiba A., Belanger N. & Feyzeau P. (2013) 'Path Planning: A 2013 Survey' Proceedings of 2013 Inter. Conf. on Industrial Engineering and Systems Management (IESM), Rabat, Morocco, pp. 1-8

Stachniss C., Mozos Ó. M. & Burgard W. (2008) 'Efficient exploration of unknown indoor environments using a team of mobile robots' Annals of Mathematics and Artificial Intelligence. Vol. 52, pp. 205-227

Stephen S., David L. & Jim L. (2016) 'Mobile robot localization and mapping with uncertainty using scale-invariant visual landmarks' Inter. Jour. of robotics Research, Vol. 21, No. 8, pp. 735–758

Suliman C., Cruceru C. & Moldoveanu F. (2009) 'Mobile Robot Position Estimation Using the Kalman Filter' Scientific Bulletin of the PetruMaior University of Tirgu-Mures, Vol. 6 (XXIII), pp. 75-78

Sun L., Liu X. & Leng M. (2006) 'An Effective Algorithm of Shortest Path Planning in a Static Environment' PROLAMAT 2006, IFIP Inter. Federation for Information Processing, Springer, Boston, Vol. 207. pp. 1-6, https://doi.org/10.1007/0-387-34403-9_35

Takaya K., Asai T., Kroumov V.& Smarandache F. (2016) 'Simulation Environment for Mobile Robots Testing Using ROS and Gazebo' 20th Inter. Conf. on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, pp. 96-101

Tao J. and Yu C. (2009) 'Real-time detection and tracking of moving object' IEEE, 2nd Inter. Symposium on Intelligent Information Technology Application, Shanghai, pp. 860-863

The Open Source Computer Vision (OpenCV), [Online] http://opencv.org (accessed on Nov 2017)

The Robot Operating System (ROS), [Online] http://www.ros.org (accessed on Nov 2017)

Thierry B. (2014) 'Traditional and recent approaches in background modeling for foreground detection: An overview' Computer Science Review, Vol. 11, No.12, pp. 31-66, https://doi.org/10.1016/j.cosrev.2014.04.001

Tian Q., Zhou B., Zhao W., Wei Y. & Fei W.W. (2013) 'Human Detection using HOG Features of Head and Shoulder Based on Depth Map' Academy Publisher, pp. 2223-2230, [Online] doi:10.4304/jsw.8.9

Topkaya I.S., Erdogan H. & Porikli F. (2013) 'Detecting and Tracking Unknown Number of Objects with Dirichlet Process Mixture Models and Markov Random Fields' Advances in Visual Computing. ISVC 2013, Lecture Notes in Computer Science, Springer, Vol. 8034, pp. 178-188, https://doi.org/10.1007/978-3-642-41939-3_18

Trung D V., Julien B & Olivier A. (2011) 'Grid-based localization and local mapping with moving object detection and tracking' Information Fusion, Elsevier, Vol. 12, No. 1, pp. 58-69, [Online] 10.1016/j.inffus.2010.01.004.hal-01023076

Tseng C.H., Lin S.-F., Jwo D.J. (2016) 'Fuzzy Adaptive Cubature Kalman Filter for Integrated Navigation Systems' Sensors, Vol. 16, No. 8:1167, pp.1-22

Ujwal K., Sangram R. & Anshuman R. (2011) 'Fuzzy Logic Based Sensor Fusion for Accurate Tracking' ISVC'11: Proceedings of the 7th Inter. Conf. on Advances in visual computing, Vol. II, pp. 209–218

User's manual Dynamixel Ex-106 ROBOTIS, pp. 1-35, [Online] http://support.robotis.com/en/product/actuator/Dynamixel/ex_series/ex-106.htm.

Varadarajan K. M. (2015) 'Topological mapping for robot navigation using affordance features' 6th Inter. Conf. on Automation, Robotics and Applications (ICARA), Queenstown, pp. 42-49, [Online] doi:10.1109/ICARA.2015.7081123

Velagic J., Lacevic B. & Osmic N. (2006) 'Efficient Path Planning Algorithm for Mobile Robot Navigation with a Local Minima Problem Solving' IEEE Inter. Conf. on Industrial Technology, Mumbai, pp. 2325-2330, doi:10.1109/ICIT.2006.372707

Verschae R. & Ruiz-del-Solar J. (2015) 'Object Detection: Current and Future Directions' Frontiers in Robotics and AI, Vol. 2, No. 29, pp.1-7, doi: 10.3389/frobt.2015.00029

Vese L. (2003) 'Multiphase Object Detection and Image Segmentation' In: Geometric Level Set Methods in Imaging, Vision and Graphics. Springer, New York, pp.175-194, https://doi.org/10.1007/0-387-21810-6_10

Villanueva-Escudero C., Villegas-Cortez J., Zúñiga-López A. & Avilés-Cruz C. (2014) 'Monocular Visual Odometry Based Navigation for a Differential Mobile Robot with Android OS' Human-Inspired Computing and Its Applications, Lecture Notes in Computer Science, Vol. 8856, pp. 281-292, https://doi.org/10.1007/978-3-319-13647-9_26

Viola P. & Jones M. (2001) 'Rapid object detection using a boosted cascade of simple features' Proceedings of the 2001 IEEE Computer Society Conference on Computer Vision and Pattern Recognition, pp. 511-518

Wang C., Meng L., She S., Mitchell I. M., Li T. & Tung F. (2017) 'Autonomous mobile robot navigation in uneven and unstructured indoor environments' In: Intelligent Robots and Systems (IROS) IEEE/RSJ Inter. Conf., pp. 109-116

Wang H., Yu Y. & Yuan Q. (2011) 'Application of Dijkstra algorithm in robot path-planning' Second Inter. Conf. on Mechanic Automation and Control Engineering, Hohhot, pp. 1067-1069, doi:10.1109/MACE.2011. 5987118

Wang J., Wei B., Zhang Y. & Chen H. (2009) 'Design of an autonomous mobile robot for hospital' IEEE International Symposium on IT in Medicine & Education, Jinan, pp. 1181-1186, doi:10.1109/ITIME.2009.5236275

Wang L., Shi J., Song G. & Shen I. (2007) 'Object Detection Combining Recognition and Segmentation', Computer Vision - ACCV 2007, Lecture Notes in Computer Science, Springer, Berlin, Heidelberg. Vol. 4843, pp. 189-199, https://doi.org/10.1007/978-3-540-76386-4_17

Wätzoldt S., Neumann S., Benke F. & Giese H. (2012) 'Integrated Software Development for Embedded Robotic Systems' Simulation, Modeling, and Programming for Autonomous Robots. SIMPAR, Lecture Notes in Computer Science, Vol. 7628, pp. 335-348, doi.org/10.1007/978-3-642-34327-8_31

Welch G. & Bishop G. (2006) 'An Introduction to the Kalman Filter' Technical Report: TR95-041, University of North Carolina, Chapel Hill, USA, pp. 1-16

Withey D., Mogokonyane K., Tikam M., Holder R., Veeraragoo M. and Gambushe M. (2020) 'Context-Aware Action with a Small Mobile Robot' International SAUPEC/RobMech/PRASA Conference, pp. 1-6.

Wolfe J. A., Marthi B. & Russel S. J. (2010) 'Combined Task and Motion Planning for Mobile Manipulation', Inter. Conf. on Automated Planning and Scheduling, pp. 254-258.

Wong L. L. S (2017), 'Learning the State of the World: Object-based World Modeling for Mobile Manipulation Robots' AI Matters, Vol.3, No.1, pp.21-22

Wong L. L. S., Kaelbling L. P. & Lozano-Pérez T. (2013) 'Manipulation-based active search for occluded objects' IEEE Inter. Conf. on Robotics and Automation, Karlsruhe, pp. 2814-2819

Wu Y., Lim J. & Yang M. H. (2013) 'Online object tracking: A Benchmark' IEEE Conference on Computer Vision and Pattern Recognition, pp. 2411-2418

Xianyu Q., Wei W., Mei Y., Yuliang W., Mingbo L., Lin X. & Yingpin S. (2020) 'Building semantic grid maps for domestic robot navigation' Inter. Jour. of Advanced Robotic Systems, pp.1-12

Xiaoyan L. & Dan L. (2017) 'Research on target detection and tracking system of rescue robot' Chinese Automation Congress (CAC), Jinan, pp. 6623-6627, doi:10.1109/CAC.2017.8243970

Xie G. & Lu W. (2013) 'Image Edge Detection Based on OpenCV' International Journal of Electronics and Electrical Engineering, Vol. 1, No. 2, pp. 104-106

Xujiong M., Feng H. & Yaowu C. (2009) 'Monocular simultaneous localization and mapping with a modified covariance Extended Kalman Filter' IEEE Inter. Conf. on Intelligent Computing and Intelligent Systems, Shanghai, pp. 900-903, doi:10.1109/ICICISYS.2009.5358248

Yang Y. & Cao Q. (2013) 'Fast Feature Points-Based Object Tracking Method for Robot Grasp' Inter. Jour. of Advanced Robotic Systems (IJARS), Vol. 10, No. 170, pp. 1-6

Yihuan Z., Jun W., Xiaonian W., Chaocheng L. & Liang W. (2015) '3D LIDAR-Based Intersection Recognition and Road Boundary Detection Method for Unmanned Ground Vehicle' IEEE 18th Inter. Conf. on Intelligent Transportation Systems, Las Palmas, pp. 499-504, doi:10.1109/ITSC.2015.88

Yilmaz A., Javed O. & Shah M. (2006) 'Object Tracking: A Survey' ACM Computing Surveys Vol. 38, No. 4, pp. 1-45

Yoko O., Nobutaka S. & Yoshiaki S. (2007) 'Environmental Mapping for Mobile Robot by Tracking SIFT Feature Points Using Trinocular Vision' SICE Annual Conference 2007, pp. 1996-2001, doi:10.1109/SICE. 2007.4421314

Yuheng S. & Hao Y. (2017) 'Image Segmentation Algorithms Overview' Computer Vision and Pattern Recognition (cs.CV), pp.1-6, arXiv:1707.02051v1[cs.CV]

Yuncheng L., Zhucun X., Gui-Song X. & Liangpei Z. (2018) 'A survey on vision-based UAV navigation' Geo-spatial Information Science, Springer, Berlin, Heidelberg, Vol. 21, No. 1, pp. 21-32, doi:10.1080/10095020.2017.1420509

Yuxiang Y., Xiang M. & Mingyu G. (2017) 'Vision System of Mobile Robot Combining Binocular and Depth Cameras' Jour. of Sensors, Vol. 2017, No. 4562934, pp. 1-12, https://doi.org/10.1155/2017/4562934

Zafari F., Gkelias A. & Leung K. K. (2019) 'A Survey of Indoor Localization Systems and Technologies' IEEE Communications Surveys & Tutorials, Vol. 21, No. 3, pp. 2568-2599, doi:10.1109/COMST.2019.2911558.

Zhang H., Fritts J. E. & Goldman S. A. (2008) 'Image Segmentation Evaluation: A Survey Unsupervised Methods' Jour. Computer Vision and Image Understanding, Vol. 110, No. 2, pp. 260-280

Zhang Y., Zhou D. & Duan G. (2006) 'An Adaptive Iterated Kalman Filter' Proc. of the Multiconf. on Computer. Eng. in Syst. Appl, pp. 1727-1730, doi:10.1109/CESA.2006.4281916

Zhang Z. (2016) 'Camera calibration: a personal retrospective' Machine Vision and Applications, Vol.27, pp. 963-965, https://doi.org/10.1007/s00138-016-0809-z

Zhu Q., Yeh M., Cheng K. & Avidan S. (2006) 'Fast Human Detection Using a Cascade of Histograms of Oriented Gradients' IEEE Computer Vision and Pattern Recognition, Vol. 2, pp. 1491-1498

Ziaei Z., Oftadeh R. & Mattila Z. (2014) 'Global Path Planning with Obstacle Avoidance for Omnidirectional Mobile Robot Using Overhead Camera' IEEE Inter. Conf. on Mechatronics and Automation, Tianjin, China, pp. 697-704

Židek K. & Hošovský A. (2014) 'Image Thresholding and Contour Detection with Dynamic Background Selection for Inspection Tasks in Machine Vision' Inter. Jour. of Circuits, Systems and Signal Processing, Vol. 8, pp. 545-554