

Prof. Grantham K.H. PANG

The University of Hong Kong, PRC

Selected Scholarly Contributions [Data Provided by Scopus]

Qiao, D., Pang, G.K.H.

[A Modified Differential Evolution with Heuristic Algorithm for Nonconvex Optimization on Sensor Network Localization](#)

(2016) IEEE Transactions on Vehicular Technology, 65 (3), art. no. 7055895, pp. 1676-1689.

Tsang, C.S.C., Ngan, H.Y.T., Pang, G.K.H.

[Fabric inspection based on the Elo rating method](#)

(2016) Pattern Recognition, 51, pp. 378-394.

Wu, T.H., Kwong, E.W.-Y., Pang, G.K.-H.

[Bio-medical application on predicting systolic blood pressure using neural networks](#)

(2015) Proceedings - 2015 IEEE 1st International Conference on Big Data Computing Service and Applications, BigDataService 2015, art. no. 7184916, pp. 456-461.

Wu, T.H., Pang, G.K.H., Choy, K.L., Lam, H.Y.

[An optimization model for a battery swapping station in Hong Kong](#)

(2015) 2015 IEEE Transportation Electrification Conference and Expo, ITEC 2015, art. no. 07165769, .

Wong, D.W.C., Choy, K.L., Lin, C., Lam, H.Y., Lee, C.K.H., Chow, H.K.H., Pang, G.K.H.

[An intelligent battery information management system to support information sharing and vehicle routing planning for battery distribution in Hong Kong](#)

(2015) International Journal of Innovation and Sustainable Development, 9 (1), pp. 1-27.

Chan, V., Wu, T.H., Pang, G.

[Design intelligence of web application for Internet direct consumer-to-consumer trading](#)

(2015) International Conference on Information Networking, 2015-January, art. no. 7057888, pp. 233-237.

Pang, G.K.-H., Kwong, E.

[Considerations and design on apps for elderly with mild-to-moderate dementia](#)

(2015) International Conference on Information Networking, 2015-January, art. no. 7057910, pp. 348-353.

Lin, C., Choy, K.L., Ho, G.T.S., Lam, H.Y., Pang, G.K.H., Chin, K.S.

[A decision support system for optimizing dynamic courier routing operations](#)

(2014) Expert Systems with Applications, 41 (15), pp. 6917-6933.

Qiao, D., Pang, G.K.H.

[Non-convex model for sensor network localization based on connectivity](#)

(2014) Wireless Communications and Mobile Computing, 14 (9), pp. 865-876.

Wu, T.H., Pang, G.K.-H., Kwong, E.W.-Y.

[Predicting systolic blood pressure using machine learning](#)

(2014) 2014 7th International Conference on Information and Automation for Sustainability: "Sharpening the Future with Sustainable Technology", ICIAFS 2014, art. no. 7069529, .

Lee, C.K.H., Ho, G.T.S., Choy, K.L., Pang, G.K.H.

[A RFID-based recursive process mining system for quality assurance in the garment industry](#)

(2014) International Journal of Production Research, 52 (14), pp. 4216-4238.

Qiao, D., Pang, G.K.H.

[Evolutionary approach on connectivity-based sensor network localization](#)

(2014) Applied Soft Computing Journal, 22, pp. 36-46.

Lin, C., Choy, K.-L., Pang, G., Ng, M.T.W.

[A data mining and optimization-based real-time mobile intelligent routing system for city logistics](#)

(2013) 2013 IEEE 8th International Conference on Industrial and Information Systems, ICIIS 2013 - Conference Proceedings, art. no. 6731973, pp. 156-161.

Pang, G.K.H., Choy, K.L.

[Particle filter for targets tracking with motion model](#)

(2013) 2013 IEEE 8th International Conference on Industrial and Information Systems, ICIS 2013 - Conference Proceedings, art. no. 6731968, pp. 128-132.

Zhao, W., Pang, G.K.H., Wong, N.

[Automatic adaptive multi-point moment matching for descriptor system model order reduction](#)

(2013) 2013 International Symposium on VLSI Design, Automation, and Test, VLSI-DAT 2013, art. no. 6533818, .

Hou, Y.-L., Pang, G.K.H.

[Multicue-based crowd segmentation using appearance and motion](#)

(2013) IEEE Transactions on Systems, Man, and Cybernetics Part A:Systems and Humans, 43 (2), pp. 356-369.

Qiao, D., Pang, G.K.H.

[Accuracy improvement of connectivity-based sensor network localization](#)

(2012) 2012 25th IEEE Canadian Conference on Electrical and Computer Engineering: Vision for a Greener Future, CCECE 2012, art. no. 6334914, .

Wang, Y., Liu, H., Pang, G.K.H., Wong, N.

[An operational matrix-based algorithm for simulating linear and fractional differential circuits](#)

(2012) Proceedings -Design, Automation and Test in Europe, DATE, art. no. 6176597, pp. 1463-1466.

Pang, G.K.H.

[Health monitoring of elderly in independent and assisted living](#)

(2012) 2012 International Conference on Biomedical Engineering, ICoBE 2012, art. no. 6178978, pp. 553-556.

Wang, Y., Zhang, Z., Koh, C.-K., Shi, G., Pang, G.K.H., Wong, N.

[Passivity enforcement for descriptor systems via matrix pencil perturbation](#)

(2012) IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 31 (4), art. no. 6171054, pp. 532-545.

Wang, Y., Hu, X., Cheng, C.-K., Pang, G.K.H., Wong, N.

[Erratum: A realistic early-stage power grid verification algorithm based on hierarchical constraints \(IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems \(2012\) 31:1 \(109-120\)\)](#)

(2012) IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 31 (3), art. no. 6152297, p. 452.

Wang, Y., Hu, X., Cheng, C.-K., Pang, G.K.H., Wong, N.

[A realistic early-stage power grid verification algorithm based on hierarchical constraints](#)

(2012) IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 31 (1), art. no. 6106741, pp. 109-120.

Hou, Y.-L., Pang, G.K.H.

[Crowd segmentation based on fusion of appearance and motion features](#)

(2011) Proceedings - 2011 3rd Chinese Conference on Intelligent Visual Surveillance, IVS 2011, art. no. 6157036, pp. 105-108.

Qiao, D., Pang, G.K.H.

[Solutions for connectivity-based sensor network localization](#)

(2011) 2011 IEEE International Conference on Mechatronics and Automation, ICMA 2011, art. no. 5985806, pp. 1056-1062.

Qiao, D., Pang, G.K.H.

[An iteratively Reweighted Least Square algorithm for RSS-based sensor network localization](#)

(2011) 2011 IEEE International Conference on Mechatronics and Automation, ICMA 2011, art. no. 5985811, pp. 1085-1092.

Qiao, D., Pang, G.K.H.

[Two-range connectivity-based sensor network localization](#)

(2011) IEEE Pacific RIM Conference on Communications, Computers, and Signal Processing - Proceedings, art. no. 6032896, pp. 220-225.

Qiao, D., Pang, G.K.H.

[Localization in wireless sensor networks with gradient descent](#)

(2011) IEEE Pacific RIM Conference on Communications, Computers, and Signal Processing - Proceedings, art. no. 6032873, pp. 91-96.

Hou, Y.-L., Pang, G.K.H.

[Multi-cue-based crowd segmentation in stereo vision](#)

(2011) Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 6854 LNCS (PART 1), pp. 93-101.

Hou, Y.-L., Pang, G.K.H.

[Multi-cue based crowd segmentation](#)

(2011) ICINCO 2011 - Proceedings of the 8th International Conference on Informatics in Control, Automation and Robotics, 2, pp. 173-178.

Pang, G.K.H., Qiao, D.

[Iontophoretic drug delivery models](#)

(2011) 2011 1st Middle East Conference on Biomedical Engineering, MECBME 2011, art. no. 5752133, pp. 331-334.

Ngan, H.Y.T., Pang, G.K.H., Yung, N.H.C.

[Automated fabric defect detection-A review](#)

(2011) Image and Vision Computing, 29 (7), pp. 442-458.

Cheng, C.-K., Du, P., Kahng, A.B., Pang, G.K.H., Wang, Y., Wong, N.

[More realistic power grid verification based on hierarchical current and power constraints](#)

(2011) Proceedings of the International Symposium on Physical Design, pp. 159-166.

Hou, Y.-L., Pang, G.K.H.

[People counting and human detection in a challenging situation](#)

(2011) IEEE Transactions on Systems, Man, and Cybernetics Part A:Systems and Humans, 41 (1), art. no. 5580105, pp. 24-33.

Wang, Y., Zhang, Z., Koh, C.-K., Pang, G.K.H., Wong, N.

[PEDS: Passivity enforcement for descriptor systems via Hamiltonian- symplectic matrix pencil perturbation](#)

(2010) IEEE/ACM International Conference on Computer-Aided Design, Digest of Technical Papers, ICCAD, art. no. 5653885, pp. 800-807.

Hou, Y.-L., Pang, G.K.H.

[Human detection in crowded scenes](#)

(2010) Proceedings - International Conference on Image Processing, ICIP, art. no. 5651982, pp. 721-724.

Zhou, H., Pang, G.K.H.

[Metadata extraction and organization for intelligent video surveillance system](#)

(2010) 2010 IEEE International Conference on Mechatronics and Automation, ICMA 2010, art. no. 5588606, pp. 489-494.

Wang, Y., Lei, C.-U., Pang, G.K.H., Wong, N.

[MFTI: Matrix-format tangential interpolation for modeling multi-port systems](#)

(2010) Proceedings - Design Automation Conference, pp. 683-686.

Ngan, H.Y.T., Pang, G.K.H., Yung, N.H.C.

[Ellipsoidal decision regions for motif-based patterned fabric defect detection](#)

(2010) Pattern Recognition, 43 (6), pp. 2132-2144.

Ngan, H.Y.T., Pang, G.K.H., Yung, N.H.C.

[Performance evaluation for motif-based patterned texture defect detection](#)

(2010) IEEE Transactions on Automation Science and Engineering, 7 (1), art. no. 4703186, pp. 58-72.

Pang, G.K.H., Chu, M.-H.

[Automated optical inspection of solder paste based on 2.5D visual images](#)

(2009) 2009 IEEE International Conference on Mechatronics and Automation, ICMA 2009, art. no. 5246351, pp. 982-987.

Pang, G.K.H., Qiao, D.

[Skin impedance models for transdermal drug delivery](#)

(2009) 2009 IEEE International Conference on Mechatronics and Automation, ICMA 2009, art. no. 5246159, pp. 1784-1788.

Qiao, D., Pang, G.K.H., Mui, M.-K., Lam, D.C.C.

[A single-axis low-cost accelerometer fabricated using printed-circuit-board techniques](#)

(2009) IEEE Electron Device Letters, 30 (12), art. no. 5308317, pp. 1293-1295.

Hui, T.-W., Pang, G.K.-H.

[Erratum: Solder paste inspection using region-based defect detection \(International Journal of Advanced Manufacturing Technology DOI 10.1007/s00170-008-1639-6\)](#)

(2009) International Journal of Advanced Manufacturing Technology, 42 (7-8), p. 735.

Hui, T.-W., Pang, G.K.-H.

[Solder paste inspection using region-based defect detection](#)

(2009) International Journal of Advanced Manufacturing Technology, 42 (7-8), pp. 725-734.

Hou, Y.-L., Pang, G.K.H.

[Human detection in a challenging situation](#)

(2009) Proceedings - International Conference on Image Processing, ICIP, art. no. 5414005, pp. 2561-2564.

Ngan, H.Y.T., Pang, G.K.H.

[Regularity analysis for patterned texture inspection](#)

(2009) IEEE Transactions on Automation Science and Engineering, 6 (1), art. no. 4483674, pp. 131-144.

Pang, G.K.H., Chu, M.-H.

[Automated inspection of solder paste by directional LED lighting](#)

(2008) Proceedings of the IEEE International Conference on Automation and Logistics, ICAL 2008, art. no. 4636152, pp. 232-237.

Hou, Y.-L., Pang, G.K.H.

[Automated people counting at a mass site](#)

(2008) Proceedings of the IEEE International Conference on Automation and Logistics, ICAL 2008, art. no. 4636196, pp. 464-469.

Qiao, D., Pang, G.K.H., Kit, M.M., Lam, D.C.C.

[A new PCB-based low-cost accelerometer for human motion sensing](#)

(2008) Proceedings of the IEEE International Conference on Automation and Logistics, ICAL 2008, art. no. 4636119, pp. 56-60.

Lam, D.C.C., Lee, Y.H., Shek, K.T., Pang, G.

[Puncture depth and the mechanical stability of microneedles](#)

(2008) BIODEVICES 2008 - Proceedings of the 1st International Conference on Biomedical Electronics and Devices, 2, pp. 291-296.

Hui, T.-W., Pang, G.K.-H.

[3-D measurement of solder paste using two-step phase shift profilometry](#)

(2008) IEEE Transactions on Electronics Packaging Manufacturing, 31 (4), pp. 306-315.

Ngan, H.Y.T., Pang, G.K.H., Yung, N.H.C.

[Motif-based defect detection for patterned fabric](#)

(2008) Pattern Recognition, 41 (6), pp. 1878-1894.

Pang, G., Chu, M.-H.

[Route selection for vehicle navigation and control](#)

(2007) IEEE International Conference on Industrial Informatics (INDIN), 2, art. no. 4384857, pp. 693-698.

Pang, G., Chu, M.-H.

[Route selection for vehicle navigation and control](#)

(2007) IECON Proceedings (Industrial Electronics Conference), art. no. 4459980, pp. 2586-2591.

Pang, G., Chu, M.-H.

[Personalised route selection system in vehicle navigation based on neural-fuzzy technologies](#)

(2007) 14th World Congress on Intelligent Transport Systems, ITS 2007, 6, pp. 4251-4261.

Ngan, H.Y.T., Pang, G.K.H., Yung, N.H.C.

[Patterned fabric defect detection using a motif-based approach](#)

(2007) Proceedings - International Conference on Image Processing, ICIP, 2, art. no. 4379085, pp. II33-II36.

Hui, T.-W., Pang, G.K.-H.

[3D profile reconstruction of solder paste based on phase shift profilometry](#)

(2007) IEEE International Conference on Industrial Informatics (INDIN), 1, art. no. 4384750, pp. 165-170.

Chu, M.-H., Pang, G.K.-H.

[Solder paste inspection by special led lighting for SMT manufacturing of printed circuit boards](#)

(2007) IFAC Proceedings Volumes (IFAC-PapersOnline), 8 (PART 1), pp. 222-226.

Ngan, H.Y.T., Pang, G.K.H.

[Novel method for patterned fabric inspection using Bollinger bands](#)

(2006) Optical Engineering, 45 (8), art. no. 087202, .

Yang, X., Gao, J., Pang, G., Yung, N.

[Textile defect classification using discriminative wavelet frames](#)

(2005) ICIA 2005 - Proceedings of 2005 International Conference on Information Acquisition, 2005, art. no. 1635053, pp. 54-58.

Yang, X., Pang, G., Yung, N.

[Robust fabric defect detection and classification using multiple adaptive wavelets](#)

(2005) IEE Proceedings: Vision, Image and Signal Processing, 152 (6), pp. 715-723.

Ngan, H.Y.T., Pang, G.K.H., Yung, S.P., Ng, M.K.

[Wavelet based methods on patterned fabric defect detection](#)

(2005) Pattern Recognition, 38 (4), pp. 559-576.

Pang, G.

[Information technology based on visible leds for optical wireless communications](#)

(2004) IEEE Region 10 Annual International Conference, Proceedings/TENCON, B, pp. B395-B398.

Pang, G., Yang, X.

[Minimum classification error-based neural network for inspection of fabric defects](#)

(2004) Proceedings of the IASTED International Conference on Neural Networks and Computational Intelligence, art. no. 413-021, pp. 196-200.

Lee, T.-C., Pang, G.

[Defect detection on fabrics by matched filters](#)

(2004) IEEE Region 10 Annual International Conference, Proceedings/TENCON, B, pp. B89-B92.

Yang, X., Pang, G., Yung, N.

[Discriminative training approaches to fabric defect classification based on wavelet transform](#)

(2004) Pattern Recognition, 37 (5), pp. 889-899.

Ngan, H.Y.T., Pang, G.K.H., Yung, S.P., Ng, M.K.

[Defect detection on patterned jacquard fabric](#)

(2004) Proceedings - Applied Imagery Pattern Recognition Workshop, 2003-January, art. no. 1284266, pp. 163-168.

Fung, G.S.K., Yung, N.H.C., Pang, G.K.H.

[Camera calibration from road lane markings](#)

(2003) Optical Engineering, 42 (10), pp. 2967-2977.

Liu, H.S., Pang, G.

[Positioning beacon system using digital camera and LEDs](#)

(2003) IEEE Transactions on Vehicular Technology, 52 (2), pp. 406-419.

Yang, X.Z., Pang, G.K.H., Yung, N.H.C.

[Discriminative fabric defect detection using adaptive wavelets](#)

(2002) Optical Engineering, 41 (12), pp. 3116-3126.

Chu, S.K.-K., Pang, G.K.-H.

[Comparison between different model of hexapod robot in fault-tolerant gait](#)

(2002) IEEE Transactions on Systems, Man, and Cybernetics Part A:Systems and Humans., 32 (6), pp. 752-756.

Kumar, A., Pang, G.K.H.

[Defect detection in textured materials using optimized filters](#)

(2002) IEEE Transactions on Systems, Man, and Cybernetics, Part B: Cybernetics, 32 (5), pp. 553-570.

Pang, G.K.H., Takahashi, K., Yokota, T., Takenaga, H.

[Intelligent route selection for in-vehicle navigation systems](#)

(2002) Transportation Planning and Technology, 25 (3), pp. 175-213.

Fung, G.S.K., Yung, N.H.C., Pang, G.K.H., Lai, A.H.S.

[Effective moving cast shadow detection for monocular color traffic image sequences](#)

(2002) Optical Engineering, 41 (6), pp. 1425-1440.

Kumar, A., Pang, G.K.H.

[Defect detection in textured materials using Gabor filters](#)

(2002) IEEE Transactions on Industry Applications, 38 (2), pp. 425-440.

Yang, X., Pang, G., Yung, N.

[Fabric defect classification using wavelet frames and minimum classification error training](#)

(2002) Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 1, pp. 290-296.

Pang, G., Kwan, T., Liu, H., Chan, C.-H.

[LED wireless](#)

(2002) IEEE Industry Applications Magazine, 8 (1), pp. 21-28.

Fung, G.S.K., Yung, N.H.C., Pang, G.K.H., Lai, A.H.S.

[Towards detection of moving cast shadows for visual traffic surveillance](#)

(2001) Proceedings of the IEEE International Conference on Systems, Man and Cybernetics, 4, pp. 2505-2510.

Zhi, Y.X., Pang, G.K.H., Yung, N.H.C.

[Fabric defect detection using adaptive wavelet](#)

(2001) ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings, 6, pp. 3697-3700.

Pang, G.K.H., Liu, H.H.S.

[LED Location Beacon System Based on Processing of Digital Images](#)

(2001) IEEE Transactions on Intelligent Transportation Systems, 2 (3), pp. 135-150.

Liu, H.H.S., Pang, G.K.H.

[Accelerometer for mobile robot positioning](#)

(2001) IEEE Transactions on Industry Applications, 37 (3), pp. 812-819.

Pang, G.K.H., Chan, C.-H., Kwan, T.T.O.

[Tricolor light-emitting diode dot matrix display system with audio output](#)

(2001) IEEE Transactions on Industry Applications, 37 (2), pp. 534-540.

Pang, G., Liu, H.

[Evaluation of a low-cost MEMS accelerometer for distance measurement](#)

(2001) Journal of Intelligent and Robotic Systems: Theory and Applications, 30 (3), pp. 249-265.

Pang, G., Poon, G.

[A portable multimedia information device in a wireless optical data link](#)

(2001) IEEE Transactions on Consumer Electronics, 47 (1), pp. 87-95.

Kumar, A., Pang, G.

[Identification of surface defects in textured materials using wavelet packets](#)

(2001) Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 1, pp. 247-251.

Fung, G.S.K., Yung, N.H.C., Pang, G.K.H., Lai, A.H.S.

[Effective moving cast shadow detection for monocular color image sequences](#)

(2001) Proceedings - 11th International Conference on Image Analysis and Processing, ICIAP 2001, art. no. 957043, pp. 404-409.

Fung, G.S.K., Yung, N.H.C., Pang, G.K.H.

[Vehicle shape approximation from motion for visual traffic surveillance](#)

(2001) IEEE Conference on Intelligent Transportation Systems, Proceedings, ITSC, pp. 608-613.