

Ehsan Akhtarkavan

Assistant Professor | Khatam University
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EDUCATION

Ph.D. Computer Engineering University of Science Malaysia, Malaysia	2009-2012
M.Sc Computer Engineering IAU University, Iran	2004-2007
B.Sc. Computer engineering IAU University, Iran	1999-2004

WORK EXPERIENCE

Assistant Professor <i>Department of Computer Engineering, Khatam University, Iran</i> <ul style="list-style-type: none">● Research, undergraduate and post graduate teaching● Manager of department Information Technology Group	2014-Now
Executive Manager <i>PIAIS Research Centre, Iran</i> <ul style="list-style-type: none">● Construction and management of several advanced laboratory● Management of 20 researchers	2017-Now
Assistant Professor <i>Department of Computer Engineering, LAU University, Iran</i> <ul style="list-style-type: none">● Research, undergraduate and post graduate teaching	2012-2014
Graduate Teaching and Research Assistant <i>Department of Computer Engineering, University of Science Malaysia, Malaysia</i> <ul style="list-style-type: none">● Data processing and modelling, Software programming, Research and technical writing	2009-2012
Data Analyst and Statistical Software Development Manager <i>Academic Center for Education, Culture and Research, Iran</i> <ul style="list-style-type: none">● Data Analyst and Statistical Software Development Manager in Urban HEART-1 project for World Health Organization Kobe Centre (WKC), Recruiter and supervisor of the data entry technicians (more than 40 persons), supervisor of the data verifying unit● Development manager of networked data entry and processing software● Data manager and data processing software developer● Market research and consulting, Project Manager● Database (SQL Server), Frontend and Backend developer● Conducting focus groups and market analysis● Expert in ASP.Net, SPSS, Mathworks Matlab, SAS, Autodesk Autocad	2004-2009

Selected Publications

Refereed journal publications

- 1) **E. Akhtarkavan**, M. F. M. Salleh, "Multiple description lattice vector quantization using multiple A4 quantizers", *IEICE Electronics Express*, Vol.17, No.17, 1233-1239.
- 2) **E. Akhtarkavan**, M. F. M. Salleh, "Design of Multiple Description Lattice Vector Quantizers Using Coinciding Similar Sublattices", *IEEE Transaction on Image Processing*, Vol.21, No.2, Feb 2012.
- 3) **E. Akhtarkavan**, M. F. M. Salleh, O Sidek, "Multiple Descriptions Video Coding Using Coinciding Lattice Vector Quantizer for H.264/AVC and Motion JPEG2000," *World Applied Science Journal*, 15 (9): 1279-1286, 2012.
- 4) **Akhtarkavan, E.**, Majidi, B. & Manzuri, M.T. "Secure communication and archiving of low altitude remote sensing data using high capacity fragile data hiding." *Multimedia Tools and Applications* (2018): 1-27. <https://doi.org/10.1007/s11042-018-6607-z>.
- 5) **Akhtarkavan, E.**, Majidi, B., Salleh, M.F.M., & JC Patra, "Fragile high capacity data hiding in digital images using integer-to-integer DWT and lattice vector quantization." *Multimedia Tools and Applications* (2020). <https://doi.org/10.1007/s11042-020-08662-7>.
- 6) M Shahrokhi, E Akhtarkavan, F Rostami, MD Azlin Md Said, S Syafalni, "A Fuzzy Logic to Predicting Velocities in Primary Sedimentation Tanks", *World Applied Sciences Journal* 15 (9), 1279-1286.
- 7) SVS Mehri, **E Akhtarkavan**, S. Erfanian "Calculating the Area of the Union of Iso-oriented Rectangles Using MapReduce," *Int. Journal of Engineering and Computer Science* 3 (05).
- 8) S.V.S. Mehri, **E. Akhtarkavan**, S. Erfanian, "Distributed Segment Tree Using MapReduce," *Int. Journal of Engineering and Computer Science* 3 (05).
- 9) M. Shabaniyan, **E. Akhtarkavan**, "A Method to Reduce Effects of Packet Loss in Video Streaming Using Multiple Description Coding," *Int. Journal of Computer & Robotics* 11 (2), 31-39, 2018.
- 10) F. Karami, **E. Akhtarkavan**, "Improving OSPF Protocol based Latency: A new algorithm based on Dijkstra by using OSPF existing Metrics in SDN networks," *Ciência e Natura* 37 (6-2), 344-348.

Conference Papers

- 1) **E. Akhtarkavan**, M.T Manzuri, "Energy Adaptive Cluster-Head Selection for Wireless Sensor Networks Using Center of Energy Mass", 13th international computer conference in Iran, 2008, Kish, Iran, printed in Springer-Verlag CCIS series.
- 2) **E. Akhtarkavan**, and M. F. M. Salleh, "Multiple Description Lattice Vector Quantization Using Coinciding Similar Lattices of A4," *Proc. IEEE Symposium on Industrial Electronics and Applications (ISIEA 2010)*, Penang, Malaysia, Oct 3-5, 2010.
- 3) **E. Akhtarkavan**, M. F. M. Salleh, "Multiple Descriptions Coding for H.264/AVC Using Coinciding A₂ Lattice Vector Quantizer," *IEEE 2011 Intl. Conference on Signal and Image Processing Applications (ICSIPA 2011)*, 16-18 Nov. 2011, Kuala Lumpur, Malaysia.
- 4) M. H. Shirafkan, **E. Akhtarkavan**, "An image steganography scheme based on discrete wavelet transform using lattice vector quantization and Reed-Solomon encoding," *2nd Intl. Conference on Knowledge-Based Engineering and Innovation (KBEI)*, 5-6th, Nov. 2015.
- 5) P. Khanzadi, B. Majidi, **E. Akhtarkavan**, A Novel Metric for Digital Image Quality Assessment using Entropy-Based Image Complexity, *4th Intl. Conference on Knowledge-Based Engineering and Innovation (KBEI-2017)*, Tehran, Iran.

- 6) P. Khanzadi, B. Majidi, **E. Akhtarkavan**, Edge Detection Using Determinant-Variance Trace Algorithm Based on Roots-Dimensional Mapping Method, *4th Intl. Conference on Knowledge-Based Engineering and Innovation (KBEI-2017)*, Tehran, Iran.
- 7) S. Sanaei, B. Majidi and **E. Akhtarkavan**, "Deep Multisensor Dashboard for Composition Layer of Web of Things in the Smart City," 2018 9th Int. Symposium on Telecommunications (IST), Tehran, Iran, 2018, pp. 211-215. doi:10.1109/ISTEL.2018.8661092.

Book chapter

Ehsan Akhtarkavan and M. F. M. Salleh (2013). Multiple Descriptions Coinciding Lattice Vector Quantizer for H. 264/AVC and Motion JPEG2000, *Advanced Video Coding for Next-Generation Multimedia Services*, Prof. Yo-Sung Ho (Ed.), ISBN: 978-953-51-0929-7, InTech, DOI: 10.5772/54296. [Available here](#).