

<b>Short Bio</b>	Assistant professor at Palestine Polytechnic University with research interests in artificial intelligence, machine learning, data science, and computer vision.
<b>Software Experience</b>	<b>Artificial intelligence:</b> Large Language Models, Prompt engineering, Retrieval-Augmented Generation, Vector databases, OpenAI, Hugging Face APIs, Embeddings <b>Machine learning:</b> Scikit-learn, TensorFlow, Keras/PyTorch, Jupyter Notebook, Google Colab <b>Big data and Semantics:</b> NoSQL, XQuery, SPARQL/RDFs. Pinecone, Marklogic
<b>Education</b>	<b>University of Tübingen, Tübingen, Germany</b> 2001-2006 PhD. in computer science. "magna cum laude" (degree 1) Awarded by the German Academic Exchange Service (DAAD) <b>University of Jordan, Amman, Jordan</b> 1997-1999 MSc. in computer science. Graduated with distinction Awarded by the German Academic Exchange Service (DAAD) <b>Palestine Polytechnic University, Hebron, Palestine</b> 1995-1997 BSc in computer systems engineering, Graduated with distinction.
<b>Work Experience</b>	<b>Palestine Polytechnic University, Hebron, Palestine</b> 2006 - Present Assistant Professor Teach several graduate/undergraduate computer science courses including artificial intelligence, machine learning and data science and image processing. Supervise several master thesis and graduation projects. <b>Ministry of Telecommunications and IT, Palestine</b> 2022 - Now Consultant Member of the national committee for Artificial Intelligence representing the academia. <b>Bethlehem University, Bethlehem, Palestine</b> 2016 - 2017 Visiting Scholar Taught several computer science courses. Assisted in constructing the curriculum of software engineering. Co-organised a workshop in software engineering. <b>Birzeit University, Birzeit, Palestine</b> 2006 - 2007 Part time lecturer Taught graduate courses in machine learning and image processing. <b>Palestine Polytechnic University, Hebron, Palestine</b> 1999 - 2001 Full time Lecturer Taught several computer science courses including introduction to programming, data structures and databases. Supervised students in their graduation projects
<b>Research Summary</b>	<b>Palestine Polytechnic University, Palestine</b> Published more than 25 conference and journal articles. Supervised more than 15 master theses. Reviewer of the International Arabic Journal of Information Technology and the Journal of Artificial intelligence and Pattern Recognition
<b>Research Projects</b>	<b>Project: MEDiterranean QUadruple helix Approach to Digitization</b> 2020 - 2023 The digitization of cultural heritage. <b>Biotechnology Research Center, PPU, Palestine</b> 2010 - 2018 Bioinformatics of Host-Pathogen Interaction.

<b>Biotechnology Research Center, PPU, Palestine</b>	2009 - 2010
Machine Learning approaches for exploring Bio-sequences.	
<b>Department of IT, PPU, Palestine</b>	2007 - 2009
Vision-based Orientation Aid for the Blind.	
<b>Department of Cognitive Systems, University of Tübingen, Germany</b>	2001 - 2006
Vision-based Features for mobile Robot Localisation (PhD).	

## Scientific Publications

- Accelerating Information Retrieval from Profile Hidden Markov Model Databases, A. Tamimi, Y. Ashhab, H. Tamimi, PLOS ONE, Nov. 2016
- Improving Classification Performance Using Genetic Programming to Evolve String Kernels, R Sultan, T Hashem, Y Ashhab The International Arab Journal of Information Technology
- Detecting Error Related Potential (ErrP) within the context of P300-Speller across multiple human subjects, Anwar Isayed and Hashem Tamimi, Munich Neurophysiology Conference, Germany, Sept. 2015
- Using Random Forest (RF) as a transfer learning classifier for detecting Error-Related Potential (ErrP) within the context of P300-Speller, Anwar Isayed and Hashem Tamimi, Bernstein conference, Germany, 2015
- Computerized Extraction Of Morphological and Geometrical Features for Plants with Compound Leaves, H Altartouri, AM Dua'A, A Idais, H Tamimi, R Arafah, Journal of Theoretical and Applied Information Technology 81 (3), 474, 2015
- Developing a Powerful In Silico Tool for the Discovery of Novel Caspase-3 Substrates: A Preliminary Screening of the Human Proteome Muneef Ayyash, Hashem Tamimi and Yaqoub Ashhab. in BMC Bioinformatics 2012, 13:14(highly accessed)
- Markerless Localization for Blind Users using Computer Vision and Particle Swarm Optimization Hashem Tamimi and Anas Sharabat in Proceedings of EvoApplications 2010, 7.-9. April, Istanbul Turkey, LNCS, Berlin: Springer, 2010 - 9th April
- A Combination of Vision- and Vibration-based Terrain Classification. Christian Weiss, Hashem Tamimi and Andreas Zell in Proceedings of the IEEE/RSJ international Conference on Intelligent Robots and Systems (IROS 2008), Nice, France, September 22-26, 2008.
- A Hybrid Approach for Vision-based Outdoor Robot Localization Using Global and Local Image Features Christian Weiss, Hashem Tamimi Andreas Masselli and Andreas Zell in Proceedings of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2007), San Diego, CA, USA, October 29 - November 2, 2007
- Appearance-based Robot Localization using Wavelets-PCA Hashem Tamimi, Christian Weiss and Andreas Zell in Autonome Mobile Systeme (AMS 2007), Kaiserslautern, Germany, October 18-19, 2007
- Vision-based Features for Mobile Robot Localization Hashem Tamimi, Ph.D. dissertation, University of Tübingen, Tübingen, Germany, 2006.
- Localization of Mobile Robots with Omnidirectional Vision using Particle Filter and Iterative SIFT Hashem Tamimi, Henrik Andreasson, Andre Treptow, Tom Duckett and Andreas Zell. Robotics and Autonomous Systems, Volume 54, Issue 9 , 30 September 2006, Pages 758-765. Selected papers from the 2nd European Conference on Mobile Robots (ECMR05)
- Retrieving Objects using Local Integral Invariants Alaa Halawani, Hashem Tamimi. in Proceedings of the 5th International Conference on Image and Video Retrieval (CIVR 2006), Tempe, Arizona, USA, July 13-15, 2006.
- Using Local Integral Invariants for Object Recognition in Complex Scenes Alaa Halawani, Hashem Tamimi, Hans Burkhardt, Andreas Zell, Accepted at the International Conference on Image Analysis and Recognition (ICIAR 2006), Portugal, September 18-20, 2006
- Appearance-based Localization of Mobile Robots using Local Integral Invariants, Hashem Tamimi, Alaa Halawani, Hans Burkhardt, Andreas Zell, accepted at the 9th International Conference on Intelligent Autonomous Systems (IAS-9), Tokyo, Japan, pp. 181-188, March 7 - 9, 2006.
- Using Descriptive Image Features for Global Localization of Mobile Robotst. Hashem Tamimi, Alaa Halawani, Hans Burkhardt, Andreas Zell, Proceedings of the 19th Autonomous Mobile Systems (AMS), Stuttgart, Germany, December 8-9, 2005.
- Using Scale Space Image Histograms for global Localization of Mobile Robots, Hashem Tamimi and Andreas Zell, accepted at the 36th International Symposium Robotics (ISR 2005), Tokyo, Japan.
- Global Robot localization using Iterative Scale Invariant Feature Transform Hashem Tamimi and Andreas Zell, accepted at the 36th International Symposium Robotics (ISR 2005), Tokyo, Japan.
- Localization of Mobile Robots with Omnidirectional Vision using Particle Filter and Iterative SIFT Hashem Tamimi, Henrik Andreasson, Andre Treptow, Tom Duckett and Andreas Zell accepted at the 2005 European Conference on Mobile Robots (ECMR05), Ancona, Italy. September 7-10, 2005
- Robot Navigation Using Biosonar for Natural Landmark Tracking Maosen Wang, Hashem Tamimi and Andreas Zell accepted at the 6th IEEE International Symposium on Computational Intelligence in Robotics and Automation (CIRA 2005), Espoo, Finland.
- Vision based Localization of Mobile Robots using Kernel approaches Hashem Tamimi and Andreas Zell IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2004), Sendai, Japan, September 28 - October 2, 2004.
- Vision-based Global Localization of a Mobile Robot using Wavelet Features Hashem Tamimi and Andreas Zell Proceedings of the 18th Autonomous Mobile Systems (AMS), Karlsruhe, 4./5. December 2003, pp. 32-41