

Awos O. Kanan

Born August 10, 1980 - Jordan

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Summary

- More than 15 years of university teaching experience in different countries (Jordan, Saudi Arabia, and Canada).
 - Established record of research and publication in the field of computer engineering.
 - Significant service contributions at program, department, college, university, and community levels.
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Education

- Ph.D. in Computer Engineering, University of Victoria, Victoria BC, Canada, 2018.
Dissertation Title: "Optimized Hardware Accelerators for Data Mining Applications"
 - M.Sc. in Computer Engineering, Jordan University of Science & Technology, Irbid, Jordan, 2006.
 - B.Sc. in Computer Engineering, Jordan University of Science & Technology, Irbid, Jordan, 2003.
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Areas of Interest

- Parallel algorithms and parallel computing.
 - Digital systems design.
 - Reconfigurable computing.
 - Computer architecture.
 - Embedded Systems.
 - Applied Machine learning.
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Scholarships/Fellowships Received

- Graduate Fellowship, University of Victoria, Canada, 2015-2016.
- Undergraduate Tuition Scholarship, Ministry of higher education, Jordan, 1998-2003.

Work Experience

- **September, 2018 - present:** Assistant Professor, Department of Computer Engineering, Princess Sumaya University for Technology, Jordan.

Courses taught:

- Digital Logic Design
 - Computer Architecture
 - Embedded Systems
 - Selected Topics in Computer Engineering (High Performance Computing)
 - Logic & Microprocessors Lab
 - Embedded Systems Lab
 - Computer Design Lab
- **November 2021, Present:** Adjunct Professor, Department of Electrical & Computer Engineering, University of Victoria, Canada.
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 - **April, 2018 - August, 2018:** Postdoctoral Fellow and Sessional Lecturer, Department of Electrical & Computer Engineering, University of Victoria, Canada.

Courses taught:

- Artificial Intelligence
- **January, 2015 - March, 2018:** Research and Teaching Assistant, Department of Electrical & Computer Engineering, University of Victoria, Canada.

Courses taught:

- Digital Logic Design Lab.
 - Computer Networks Lab.
- **September, 2009 – December, 2014:** Full-time Lecturer, Department of Computer Engineering, Salman Bin AbdulAziz University, KSA.

Courses taught:

- Computer Programming (C++).
- Object-Oriented Programming (C#).
- Digital Logic Design.
- Computer Organization and Design.
- Computer Architecture.
- Microprocessors and Assembly Language Programming.
- Digital Systems Design Lab (Verilog and FPGA).
- Digital Logic Lab.
- Computer Maintenance Lab.

- Computer Networks Lab.
- **September, 2006 – September, 2009**: Full-time Lecturer, Department of Computer Engineering, University of Jordan.

Courses taught:

- Digital Logic Design.
 - Computer Networks.
 - Microprocessors & Assembly Language.
 - Computer Design Lab.
 - Digital Logic Lab.
 - Assembly Language Lab.
 - Microprocessors Lab.
 - Microprocessors Design Lab.
- **October 2004- September, 2006**: Computer Networks Lab Supervisor and Teaching Assistant, Department of Computer Engineering, Philadelphia University, Jordan.

Courses taught:

- Computer Networks Lab.
- C++ Programming Lab.
- Tutorials for several courses like, C++ programming, computer networks, and digital logic design.
- Several training courses in computer networks.

Publications

Journals:

1. Ali Alzahrani, **Awos Kanan**, "Machine Learning Approaches for Developing Land Cover Mapping", *Applied Bionics and Biomechanics*, vol. 2022, Article ID 5190193, 2022.
2. **Awos Kanan**, Sreejith Munthikodu, "Image Pattern Recognition using DCT-based Feature Extraction and Genetic Search Feature Selection", *International Journal of Emerging Trends in Engineering Research*, Vol. 8 No. 7, pp. 3844-3849, 2020.
3. **Awos Kanan**, Fayez Gebali, Atef Ibrahim, and Kin Fun Li, "Low-Complexity Scalable Architectures for Parallel Computation of Similarity Measure", *Scientific Programming*, vol. 2019, Article ID 3185137, 2019.

4. Narges Attarmoghaddam, Kin Fun Li, and **Awos Kanan**, "FPGA Implementation of Crossover Module of Genetic Algorithm", *Information*, Vol 10, no. 6, 2019.
5. **Awos Kanan**, Fayez Gebali and Atef Ibrahim, "Design Space Exploration of 2-D Processor Array Architectures for Similarity Distance Computation", *IEEE Transactions on Parallel and Distributed Systems*, Vol. 28, No. 8, pp 2218-2228, Aug 2017.
6. **Awos Kanan**, Fayez Gebali, and Atef Ibrahim, "Fast and Area-Efficient Hardware Implementation of the K-means Clustering Algorithm", *WSEAS Transactions on Circuits and Systems*, Vol. 15, pp 133-142, 2016.
7. Eldos, Taisir, Waleed Nazih, and **Awos Kanan**. "Maximally Distant Codes Allocation Using Chemical Reaction Optimization and Ant Colony Optimization Algorithms." *Journal of Computer Science* 11.8 (2015): 892.
8. **Awos Kanan**, Taisir Eldos, Mohammed Al-kahtani, "Mobile Ad Hoc Networks Routing Using Ant Colony Optimization", *World of Computer Science and Information Technology Journal (WCSIT)*, Vol. 3, No. 6, pp 105–109, 2013.
9. Taisir Eldos, Mohammad Khubeb Siddiqui and **Awos Kanan**, "On The KDD'99 Dataset: Statistical Analysis for Feature Selection", *Journal of Data Mining and Knowledge Discovery*. Volume 3, Issue 3, pp.88–90, 2012.
10. Ahmad Dalal'ah, Samir Bataineh, and **Awos Kanan**, "Improving TCP Performance over Mobile Ad Hoc Networks", *International Journal of Internet Technology and Secured Transactions (IJITST)*. Volume 1 No. 1,2, PP.137–159, 2010. Inderscience Publishers, Geneva, Switzerland.

Conferences:

1. **Awos Kanan**, Fayez Gebali, Atef Ibrahim, and Kin Fun Li, "Scalable and Parameterizable Processor Array Architecture for Similarity Distance Computation" , In *10th International Conference on Information and Communication Systems (ICICS)*, pp. 245-249. IEEE, 2019.
2. **Awos Kanan**, Fayez Gebali, Atef Ibrahim, and Kin Fun Li , "Linear Processor Array Architectures for Similarity Distance Computation" In *IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT)*, pp. 614-621. IEEE, 2019.
3. Faisal Alshanketi, Issa Traoré, **Awos Kanan**, and Ahmed Awad, "Adaptive Mobile Keystroke Dynamic Authentication Using Ensemble Classification Methods" , In *International Conference on Intelligent, Secure, and Dependable Systems in Distributed and Cloud Environments*, pp. 38-49. Springer, Cham, 2018.

4. Taisir Eldos, **Awos Kanan**, Abdulla Aljumah , Solving The Printed Circuit Board Drilling Problem By Ant Colony Optimization Algorithm, *In the Proceedings of International Conference on Soft Computing and Applications, ICSCA'13*, San Francisco - CA, USA, 2013.
5. **Awos Kanan**, Ahmad Dalal^{ah}, Samir Bataineh. TCP Performance in Ad Hoc Networks. *In International Conference for Internet Technology and Secured Transactions (ICITST 2008)*, June 21–23, Ireland, 2008.

Activities and Services

- Advisor of the Robotics Club at Princess Sumaya University for Technology.
- Advisor of the IEEE Robotics and Automation Society (RAS) Chapter at Princess Sumaya University for Technology.
- Chair of the Competitions and Projects Committee, Princess Sumaya University for Technology.
- Member of the Scientific Research Committee, Princess Sumaya University for Technology.
- Program Manager, Microsoft SkillsLab Program, Princess Sumaya University for Technology.
- Member of the graduate studies committee, Department of Computer Engineering, Princess Sumaya University for Technology.
- Member of the study plan committee, Faculty of Engineering, Philadelphia University.
- Graduation projects supervisor/Examiner, University of Jordan & Princess Sumaya University for Technology.
- Practical training supervisor, University of Jordan & Princess Sumaya University for Technology.
- Member of the organizing committee for the National Technology Parade 2008, University of Jordan.
- Member of the Quality and Academic Accreditation Committees, Salman Bin AbdulAziz University & Princess Sumaya University for Technology.
- Member of the Course Scheduling committee, College of Computer Engineering and Sciences, Salman Bin AbdulAziz University.

Courses Attended

- CCNA CISCO Academy, (4 semesters), CISCO Academy Center, Jordan University of Science & Technology, Jordan, 2003.
- UNIX Solaris Administration 9, STS Training Center, Jordan, 2007.

References

- **Dr. Fayez Gebali**
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University of Victoria
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