

Dr. Yousef Awwad Daraghmi

Full Professor

Department of Computer Systems Engineering

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Work Experience

- | | |
|-----------------|---|
| 9/2024-Present | <p>University President Assistant for Information Technology
<i>Palestine Technical University- Kadoorie</i></p> <ul style="list-style-type: none">• Managing the computer center and the IT departments at university<ul style="list-style-type: none">○ Computer Network, Software Development, Servers and Systems, Maintenance and Support• Strategic planning for IT infrastructure and Digital Transformation at University |
| 6/2024-Present | <p>Full Professor
<i>Department of Computer Systems Engineering, Palestine Technical University- Kadoorie</i></p> <ul style="list-style-type: none">• Teaching Master degree courses: data analysis in smart grids, advanced topics (blockchain, big data, cloud computing)• Research on Machine and Deep Learning, Blockchain, Internet of Things• Supervising Bachelor, Master and PhD students in Palestine |
| 10/2002-Present | <p>Founder of Hisba.co
Developing accounting and stores management software</p> |
| 9/2022-08/2024 | <p>Director of International Relation Office
<i>Palestine Technical University- Kadoorie</i></p> <ul style="list-style-type: none">• Developing cooperation with international academic and non-academic organizations• Writing proposal for grants• Supervising running projects funded by international donors |

- 5/2020-6/2024 **Associate Professor**
Department of Computer Systems Engineering, Palestine Technical University- Kodoorie
- Teaching B.A. courses: Algorithms, Computer Architecture and Organization, Microprocessors,
 - Master degree courses: data analysis in smart grids, advanced topics (blockchain, big data, cloud computing)
 - Developing new courses, e.g., advanced database course and special topics course, new trends in computing, data analysis in smart grids
 - Research on Intelligent Transportation Systems, Deep Learning, Blockchain, Internet of Things
 - Supervising Bachelor, Master and PhD students in **Palestine** and **Taiwan**
- 4/2014-5/2020 **Assistant Professor**
College of Engineering and Technology, Palestine Technical University- Kodoorie
- Teaching Algorithms, Computer Architecture, Intelligent Systems
 - Research on Intelligent Transportation Systems, Deep Learning, Blockchain
- 9/2016-8/2018 **Chairman of Computer Systems Engineering Department**
College of Engineering, Palestine Technical University- Kodoorie
- Managing staff, students and courses in the department
 - Participating in curriculum development
 - Participating in university committees: conference committees, job interview committees, and college committee
- 1/2014-6/2014 **Senior Software Engineer**
*CacaFly company, **Taiwan** (Agent in East Asia of Facebook, Google, and Microsoft)*
- Optimizing Online Advertisement and real-time bidding
 - Mining big data of digital advertisement
 - Designing distributed data system (shards) for the company
- 9/2009- 1/2014 **Research Assistant**
Network Optimization Lab (NOL), National Chiao Tung University, Taiwan
- Research on Vehicular Ad Hoc Networks (VANETs), Dynamic Guidance Systems, Spatio-temporal traffic data modeling

- 2/2009-9/2009 **Lecturer**
Computer science college, AL-Quds Open University, Palestine
- Teaching Java, Algorithms, and Logic Design
- 4/2003 – 8/2005 **Head of Technical and Computer Division**
Jericho Educational Directorate, Ministry of Education, Palestine
- Maintaining computer networks and labs in the directorate and schools
 - Training employees and teachers on computers, software, and networks

Education

- 9/2009- 01/2014 **PhD Degree** Excellent with honor, 94 %
Computer Science and Engineering, National Chiao Tung University, Taiwan
- Studied fundamental and up-to-date courses in computer systems
 - Research topic: Intelligent Transportation Systems
 - Publication in high class journal such as IEEE transaction on ITS and IEEE network magazine
 - Reviewer of several scientific journals
- 9/2005- 6/2007 **Master degree** Excellent with honor, 93 %
Computer Science and Information Engineering, National Chiao Tung University, Taiwan
- Studied fundamental and up-to-date courses in computer systems
 - Research topic: E-learning and mobile learning for improving students interactivity
 - Publication in two conferences and one journal
- 9/1997-6/2002 **Bachelor degree** Very good, 82.7%
Electrical Engineering –Computer field, AL-Najah National University, Palestine
- Research project: Detecting the quality of pavement by electronic sensors
 - The project involves: designing embedded system with electronic circuits and low-level microprogramming (PIC) and high level (.net) programming
- 9/1996-6/1997 **Tawjihi** (high school certification) Excellent : 93.6%
Tubas Secondary School, Palestine

Research Interests

- [1] Machine Learning, Deep Learning and Federated Learning in different applications
- [2] Blockchain applications

Students Supervision

PhD Degree Students

- [1] Mohammad Atif Sarwar, Network Optimization Lab, National Yang Ming Chiao Tung University – Taiwan, 2019-2023, Title: *A Video-based Framework for Repetitive Activity Analysis*
- [2] Mohammad Saffarini, Arab American University – Palestine, 2020-2024, thesis Title: *Automatic Road Roughness Detection and Ranking Using Deep Learning and Computer Vision*
- [3] Rasha Saffarini, Arab American University – Palestine, 2020-2024, thesis Title: *Detecting Road Anomalies Using Deep Learning Methods*

Master Degree Students

- [1] Rawan Abu Baker, Palestine Technical University – Kadoorie, 01/2024 – present, Topic: Smart Shopping Carts Utilizing Deep Learning for Recognizing Shopping Activities
- [2] Shorouq Khamees, Palestine Technical University – Kadoorie, 11/2023-Present, Topic: *Short Term Forecasting of Electrical Load Using Machine Learning Methods*
- [3] Owais Zaid, Palestine Technical University – Kadoorie, 12/2023-Present, Topic: *An Improved Data Entry Using Voice Recognition: Digital Accounting System as A Case*
- [4] Manar Yahya, Palestine Technical University – Kadoorie, 04/2023-05/2024, Topic: *Detection Powdery Mildew Disease in Cherry Plant leaves using Machine Learning Techniques*
- [5] Waed Mohammad, Palestine Technical University – Kadoorie, 03/2023-01/2024, Topic: *Analyzing Agricultural Drone Data Using Machine Learning Models for Improving Crops Productivity*
- [6] Hazim Harb, Palestine Technical University – Kadoorie, 09/2021-02/2024, Topic: *Developing a Blockchain Based System for Preventing Fraud and Manipulation in InsurTec Sector: Insurance Companies in Palestine as A Case*
- [7] Ibrahim Shawahneh, Palestine Technical University – Kadoorie, 2020-2022, Topic: *Digital Forensic of Vehicle Dashcams*
- [8] Mohammad Zitawi, Palestine Technical University – Kadoorie, 2020-2022, Topic: *Detecting Fake Images in Social Media*
- [9] Shadi Zakarneh, Palestine Technical University – Kadoorie, 2020-2023, Topic: *Blockchain for Transparent and Secure Anticorruption Complain System*

- [10]Taqi Alqam, Arab American University - Palestine, 2021-2023, Topic: *Android Malware Prediction Based on Deep Learning*

Bachelor Degree Students

(selected from Palestine Technical University – Kadoorie)

- [1] Fareed Qararyah, Qais Ibrahim, Jihad Kitaneh, 09/2019 – 06/2017, Topic: Accurate and Real time Traffic Sign Recognition Using AI Algorithms
- [2] Noor Jallad, 09/2020-06/2021, Topic: Developing a Blockchain System for The Palestinian Anticorruption Commission
- [3] Rawan Abu Baker, 09/2029-06/2020, Developing a Blockchain System for Supporting Electronic Elections
- [4] Hamsa Mohammad, Ruba Maali, Mahmoud Ghanem, Riham Arar, Ammar Abu Zant, 09/2016-06/2017, Topic: An IoT System for Detecting Speed Bumps
- [5] Mohammad Saffarini, Saleh Shayeb, Rawan Khader, 09/2017-06/2018, Topic: An IoT System for Enabling Blind People to See Using their Tongues

Thesis/Dissertation examiner

- [1] Master thesis, Nour Al-Hendi, An Najah National University, Automated Optic Disc Segmentation for Fundus Images Based On Artificial Neural Networks, 08/2024
- [2] PhD, Aktham Sawan, Al-Quds University, Enhancement of a Machine Learning-Based Approach for Stroke Classification Using Electroencephalogram (EEG) Signals, 07/2024
- [3] Master thesis, Lubna Snono, Al-Quds Open University, topic: The effect of using Artificial Intelligence applications on the Performance of Employees in Palestinian Islamic Banks, 06/2024
- [4] Master thesis, Mohannad Amarneh, Arab American University Palestine, topic: Predicting Anxiety, Depression, and Stress Mental Health Disorders Using Machine Learning Algorithms, 02/2024
- [5] Master thesis, Yara Zayed, Arab American University Palestine, topic: Lung Cancer Detection System Using Medical Image Processing, Machine Learning, and Deep Learning Approaches, 01/2024
- [6] Master Thesis, Ashraf Qawasmi, Al-Quds Open university, topic: Human Resource Management Information Systems in Industrial Companies in Hebron and Their Role in Organizational Effectiveness, 09/2023
- [7] Master thesis, Hamed Alhjabdullah, Palestine Technical University – Kadoorie, topic: Artificial Intelligence Capabilities and Their Relationship to the Strategic Decisions in the Palestinian Ministries, 09/2023

- [8] Master thesis, Mohannad Hendi, Arab American University Palestine, topic: Accurate Pedestrian Detection for Human Crowds Using Deep Learning Techniques, 07/2023
- [9] Master thesis, Mohammad Fathallah Ghanem, Arab American University Palestine, topic: Early and Accurate Prediction of Heart Disease Using Machine Learning: a Feature Selection, 03/2023
- [10] Master thesis, Areej Sawwan, An-Najah National University, topic: A Dynamic Ontological Framework for Bukhari Ahadith, 03/2023
- [11] Master thesis, Oroob Abdullah Farhan Yassin, Arab American University Palestine, topic: Diagnosis and Classification of Brain Tumors Based on Deep Learning Techniques, 02/2023
- [12] Master thesis, Leena Suadi, Alquds Open university, topic: The Influence of Digital Transformation on the Quality Level of the Governmental Services: The Case of the Palestinian Land and Water Settlement Authority, 2022
- [13] Master thesis, Eman Mukhaimer, An-Najah National University, topic: Pandemic-Based School Classes Scheduling Automation Algorithm: Palestinian Schools As A Testing Case, 2022
- [14] Master thesis, Samer Bassam Mohammad Sweileh, Arab American University Palestine, topic: Diagnosis and classification of Hypothyroidism and Hyperthyroidism based on Machine Learning Techniques, 2022
- [15] Master thesis, Azhar Omar Ghanem, An-Najah National University, topic: Agile-Scrum Backlog Changes Optimization In Software Engineering Organizations, 2022
- [16] Master thesis: Mohammed Sudqi Mohammed Fuqaha, Arab American University Palestine, topic: Preparing images for Embroidery, 2022
- [17] Master thesis, Mohammad Salaheddeen, Arab American University Palestine, topic: Assessment of Health Information Security and Privacy Protection in the Palestinian Ministry of Health, 2021
- [18] Master thesis, Ali Mohammad Ali Hussein, Arab American University Palestine, 2019, topic: Electricity Consumption Prediction Using Artificial Neural Networks and Evolutionary Algorithms: A Case Study Tulkarm City, 2021
- [19] Master theis, Abedelkareem Riad Kamel Zidan, Arab American University Palestine, 2019, topic: Prediction of Compressive Strength of Concrete in Palestinian Governorates Using Machine Learning Techniques, 2021
- [20] Master thesis, Younes Nedal Younes Hantoli, Arab American University Palestine, 2019, topic: Prediction and Classification Analytics of Obesity Datasets Using a Hybrid Model of Clustering and Neuro-Fuzzy Methods, 2021
- [21] Master thesis, Mohammad Safarini, Arab American University Palestine, topic: Automated image classification in culture heritage using KLMMK Algorithm, 2019
- [22] PhD dissertation, Venkatarao Palacherla, Visvesvaraya Technological University - India, topic: Performance Evaluation of FBGs for Dispersion Compensation, 2019

Professional Development Activities

- [1] Manager of *Generative AI in Assessment and Feedback Activities of Higher Education Courses/ HEGenAI* project funded by **EU KA220 HED**, 2024 - 2027,
- [2] Manager of *PhDGOV* project funded by **Erasmus+ CBHE**, 2023-2026, <https://phdgov.najah.edu/en/>
- [3] Manager of *AgroTec* project funded by **Erasmus+ VET**, 2022 - 2025, <https://nuct.edu.jo/agrotec/about/>
- [4] Member of the National Technical Committee for establishing the *National Artificial Intelligence Center* funded by the **Korean Government**, 2023-present.
- [5] Member of Research Evaluation committee, Ministry of Higher Education and Scientific Research, Palestinian Islamic Bank Research Award, 10/2022-07/2023
- [6] Member of Graduate Studies Board, Palestine Technical University – Kadoorie, 09/2022-09/2023
- [7] Member, Administrative and financial Manager in “*Disability as Diversity: The Inclusion of Students with Disabilities in Higher Education/ Edu4Aall*” funded by **Erasmus + CBHE**, 11/2020 – 01/2024, <https://edu4all.psdpal.org/>
- [8] Member, Administrative and financial Manager of “*Pathway in Forensic Computing/ FORC*” funded by **Erasmus + CBHE**, 2017-2020
- [9] Visiting scholar, Network Optimization Lab, National Chiao Tung University - Taiwan, 06/2019-09/2019
- [10] Member of UNIMED (Mediterranean Universities Union) SubNetwork on Transports & Logistics, 2020-2022
- [11] Publicity chair of 2018 IEEE Symposium Series on Computational Intelligence
- [12] Head of the Scientific Committee, Undergraduate Research and Innovation Conference in Engineering and Information Technology, 2017 and 2018
- [13] **Technical Program Committee member of conferences, (Selected):**
 - International Conference on Advances in Vehicular Systems, Technologies and Applications, in 2019, 2022, and in 2023
 - VEHICULAR 2024 The International Conference on Contemporary Engineering and Computing 2024 (ICCEC 2024)
 - The first QOU International Conference on Information and Communication Technology, 2023
 - 11th International Conference on Computational Collective Intelligence 2019
 - The International Conference on Connected Vehicles and Expo in 2012, 2013, 2014, and 2015
 - The International Conference on Intelligent Transportation Systems Telecommunications (ITST) in 2012, 2013, 2015, 2017, and 2018
 - Asia-Pacific Network Operations and Management Symposium (2015-2023)
 - 2020 and 2021 International conference on Promising Electronic Technologies

[14] **Reviewer in high rank journals**

<https://www.webofscience.com/wos/author/record/1106699> (selected)

- IEEE Transaction on Intelligent Transportation Systems,
- IEEE network magazine,
- IET Intelligent Transportation Systems
- Transactions on Multimedia Computing Communications and Applications, ACM
- Big Data and Cognitive Computing, MDPI
- Applied Sciences, MDPI
- Sensors, MDPI
- Mathematics, MDPI

Talks

- [1] *Digital Transformation in Transportation: Intelligent Transportation Systems*, in the Sixth Forum for Innovation organized by the Higher Council for Innovation and Excellence, 2021
- [2] *Internet of Vehicles: Current Situation and Future Trends*, At the Arab American University Engineering day, 2019
- [3] *Cloud Computing for Office Management*, Palestine Technical University workshop using Hi-Tech for efficient administration, 2019
- [4] *Blockchain Current Research*, Al-Quds Open University forum on Fintech, 2018
- [5] *Introduction to Blockchain*, Undergraduate Research and Innovation conference, Palestine Technical University, 2018

Funded Research Projects

- [1] EU KA220 HED, *Generative AI in Assessment and Feedback Activities of Higher Education Courses/ HEGenAI*, Budget=Euro400,00 ; 09/2024 -08/2027
- [2] Erasmus+, CBHE, *Bologna for Science Education in Palestine and Jordan*, PTUK portion=Euro120,000 ; 2024-2027
- [3] Al-Maqdisi project, *AgroChain: Blockchain-Powered Traceability System for a Transparent and Secure Agricultural Value Chain*, funded by French ministry of higher education, PTUK portion =Euro 15,000 ; 2023-2025
- [4] Erasmus+, CBHE, *Reforming the Governance of PhD Programs at Palestinian Higher Education Institutions (PhDGOV)*, PTUK portion=Euro90,000 ; 2023-2026 <https://phdgov.najah.edu/en/>
- [5] Erasmus+ (VET) project, *AgroTechnology VET Centres to Network and Train Future Farmers in Jordan and Palestine (AgroTec)*, PTUK portion=Euro 56,000 ; 2022 <https://nuct.edu.jo/agrotec/about/>
- [6] Erasmus+, CBHE project, *Disability as Diversity :The Inclusion of Students with Disabilities in Higher Education (Edu4ALL)*, Euro960,379.0 PTUK portion=Euro156,000 ; 11/2020-07/2024, <https://edu4all.psdpal.org/>

- [7] Al-Maqdisi project, *The use of Narrow Band Internet of things (NBloT) in Healthcare*, funded by French ministry of higher education, PTUK portion =Euro 15,000 ; 2020-2022
- [8] Erasmus+ CBHE project, *Pathway in Forensic Computing*, 11/2016-06/2020
- [9] Sprout Project by the Ministry of Education (MOE), Taiwan, Network Optimization Lab, National Chiao Tung University, 2010-2014
- [10] Fund from Ministry of Science and Technology (MOST), Taiwan, under Grant MOST 109-2627-H-009-00, Network Optimization Lab, National Chiao Tung University, 2010-2014
- [11] Ministry of Science and Technology, Taiwan grants MOST 110-2627-H-A49-001, Network Optimization Lab, National Chiao Tung University, 2010-2014
- [12] Ministry of Transportation and Communication Grant MOTC-STAO-101-02, Taiwan, Network Optimization Lab, National Chiao Tung University, 2010-2014
- [13] Taiwan National Science Council under Grant NSC101-2628- E-009-014-MY3, Network Optimization Lab, National Chiao Tung University, 2010-2014
- [14] Taiwan National Science Council NSC 94-2520-S-009-004 and 95- 2520-S-009-003, Distributed Computing Systems, National Chiao Tung University, 2005-2007

Trainings (Selected)

- [1] Training on Agriculture Technology (AgorTec project – Erasmus+) in University of Nitra, Slovakia 10/2023
- [2] Training on digital Accessibility in the university of the Basque Country, 6-10/03/2023
- [3] Training on Assistive Technologies and digital accessibility for students with disabilities (Edu4ALL project – Erasmus+), at University of Athens, Greece, 10/2021, at INT@E Leipzig Germany 06/2022, Athens 11/2022, and INT@E Leipzig 06/2023
- [4] Online course on Data Science and Engineering, Harvard University, start 10/2021 – 03/2022
- [5] Forensic Computing (FORC project – Erasmus+), University of Cagliari – Italy, June/2018
- [6] Digital Forensics (FORC project – Erasmus+), Middle sex university, April/2019
- Internet of Things and Cloud Computing, Notre Dame Initiative for Global Development, January/2019

Awards

- [1] Palestine Technical University Kadoorie Award for Distinguished Research publication, 2019
- [2] Palestine Technical University Kadoorie Award for Distinguished Research publication, 2020
- [3] Palestine Technical University Kadoorie Award for High Citation and Distinguished Research publication, 2022
- [4] The Best Paper Award from the international conference on Intelligent Transportation Systems Telecommunications (ITST), 2012
- [5] Funp – Taiwan, Company Award for outstanding PhD students, 2011
- [6] Industrial Technology Research Institute (ITRI) scholarship for PhD research, Taiwan, 2009
- [7] Computer Science Honor Degree for high academic performance, National Chiao Tung University, Taiwan, October, 2006
- [8] National Chiao Tung scholarship for high academic performance, Taiwan, September 2006.

Research Publications

<https://scholar.google.com/citations?user=wtLQddEAAAAJ&hl=en>

Journal Articles

- [1] E. Daraghmi, S. Jayousi, **Y. Daraghmi**, R. Daraghmi and H. Fouchal, "Smart Contracts for Managing the Agricultural Supply Chain: A Practical Case Study," in *IEEE Access*, accepted 07/2024, impact factor = 3.9
- [2] Eman Yaser Daraghmi, Sajida Qadan, **Yousef Daraghmi**, Rami Yussuf, Omar Cheikhrouhou, Mohammed Baz, " From Text to Insight: An Integrated CNN-BiLSTM-GRU Model for Arabic Cyberbullying Detection," *IEEE Access*, Volume 12, pp. 103504-103519, 07/2024, impact factor = 3.9
- [3] Muhammed Saffarini, Amjad Rattroot, **Yousef-Awwad Daraghmi**, Muath Sabha, "Automatic Road Roughness Detection and Ranking Using Deep Learning And Computer Vision," *Journal of Theoretical and Applied Information Technology*, Volume 102, issue 13, July, 2024
- [4] **Yousef-Awwad Daraghmi**, Ibrahim Shawahneh, "Digital Forensic Analysis of Vehicular Video Sensors: Dashcams as a Case, *Sensors*, Volume 23, issue 17, P.P. 1-19, 2023, impact factor = 3.9
- [5] MA Sarwar, YC Lin, **Yousef-Awwad Daraghmi**, TU İk, YL Li, "Skeleton Based Keyframe Detection Framework for Sports Action Analysis: Badminton Smash Case, *IEEE Access*, Volume 11, P.P. 90891 – 90900, impact factor = 3.9

- [6] Rasha Saffarini, Faisal Khamayseh, **Yousef-Awwad Daraghmi**, Derar Elyan, Muath Sabha, "Survey of Road Anomalies Detection Methods, *International Journal of Intelligent Systems Technologies and Applications*, Volume 21, issue 3, 2023, PP. 280-302
- [7] Raed S. M. Daraghma, **Yousef Daraghmi**, Eman Daraghmi, Hacene Fouchal, Marwan Ayaida, " Comparison of NB-IOT, Lora, and Sigfox IOT Protocols in a Wireless Sensor Network," *International Journal on Communications Antenna and Propagation*, Volume 13, issue 2, P.P. 80-88. 2023
- [8] Sheng-Hsien Cheng; Muhammad Atif Sarwar; **Yousef-Awwad Daraghmi**; Tsi-Uí ĩk; Yih-Lang Li, "Periodic Physical Activity Information Segmentation, Counting and Recognition From Video", *IEEE Access*, Volume 11, P.P. 23019-23031, 2023, impact factor = 3.9
- [9] **Yousef Awwad Daraghmi**, Bahaa Yahya, Eman Yaser Daraghmi, "Has ovid-19 Affected Software Usability: Mobile Accounting System As A Case," *Journal of Theoretical and Applied Information Technology*, volume 101, issue 2, 2023
- [10] **Yousef-Awwad Daraghmi**, Eman Yaser Daraghmi, Raed Daraghma, Hecen Fouchal, Marwane Ayaida, " Edge–Fog–Cloud Computing Hierarchy for Improving Performance and Security of NB-IoT-Based Health Monitoring Systems," *Sensors*, Volume 22, 2022, P.P. 1-17, impact factor = 3.9
- [11] **Yousef-Awwad Daraghmi**, Mamoun Abu Helou, Eman-Yaser Daraghmi, Waheeb Abu-ulbeh," IoT-Based System for Improving Vehicular Safety by Continuous Traffic Violation Monitoring," *Future Internet*, Volume 14, issue 11, 2022, P.P. 1-17, Q1
- [12] **Yousef-Awwad Daraghmi**, Eman-Yaser Daraghmi, "RAPD: Rapid and Participatory Application Development of Usable Systems During COVID19 Crisis," *IEEE Access*, Volume 10, 2022, P.P. 93601 – 93614, impact factor = 3.476
- [13] Tzu-Wei Yu, Muhammad Atif Sarwar, **Yousef-Awwad Daraghmi**, Sheng-Hsien Cheng, Tsi- Uı ĩk, Yih-Lang Li "Spatiotemporal Activity Semantics Understanding Based on Foreground Object Segmentation: iCounter Scenario," *IEEE Access*, Volume 10, 2022, impact factor = 3.9
- [14] Ming-Hong Lin, Muhammad Atif Sarwar, **Yousef-Awwad Daraghmi**, Tsi- Uı ĩk, "On-Shelf Load Cell Calibration for Positioning and Weighing Assisted by Activity Detection: Smart Store Scenario," *IEEE Sensor Journal*, volume 22, issue 4, 2022, impact factor = 3.30
- [15] Eman Daraghmi, Mamoun Abu Helou, **Yousef-Awwad Daraghmi**, "A Blockchain-Based Editorial Management System," *Security and Communication Networks*, Wiley, Hindawi, 2021, P.P. 1-17, impact factor = 1.97
- [16] Anas Ibrahim, Alexander Chefranov, Nagham Hamad, **Yousef-Awwad Daraghmi**, Ahmad Al-Khasawneh, Joel J. P. C. Rodrigues, "NTRU-Like Random Congruential Public-Key Cryptosystem for Wireless Sensor Networks," *Sensors*, volume 20, issue 16, 2021, impact factor=3.576
- [17] **Yousef-Awwad Daraghmi**, Tsung-Hsiang Wu, Chih-Wei Yi, "Crowdsourcing-based Road Pavement Evaluation and Indexing," *IEEE transaction on Intelligent Transportation Systems*, Volume 23, issue 5, Dec 2020, P.P. 1-12 - impact factor = 6.492
- [18] **Yousef-Awwad Daraghmi**, Eman Yasser Daraghmi, Motaz Daadoo, Samer Alsaadi "Forecasting for Smart Energy: An Accurate and Efficient Negative Binomial Additive Model,"

- [19] **Yousef-Awwad Daraghmi**, Eman Yasser Daraghmi, Samer Alsaadi, Derar Eleyan, "Accurate and Time-Efficient Negative Binomial Linear Model for Electric Load Forecasting in IoE," *Transactions on Emerging Telecommunications Technologies*, 2019, P.P. 1-14, impact factor = 2.63
- [20] Eman Yasser Daraghmi, **Yousef-Awwad Daraghmi**, Shyan-Ming Yuan," MedChain: A Design of Blockchain-based System for Medical Records Access and Permissions Management, *IEEE Access*, volume 07, Issue 01, 2019, P.P. 164595-164613, impact factor = 3.9
- [21] Eman Yasser Daraghmi, **Yousef-Awwad Daraghmi**, Shyan-Ming Yuan,"UniChain: A Design of Blockchain-Based System for Electronic Academic Records Access and Permissions Management", *Applied Sciences*, volume 9, issue 4966, 2019, P.P. 1-27, impact factor = 2.679
- [22] Eman Yasser Daraghmi, **Yousef-Awwad Daraghmi**, "Advanced Diffusion Approach to Dynamic Load-Balancing for Cloud Storage," *International Journal of Parallel and Distributed Systems and Networks*, volume 10, Issue 2/3, 2019, P.P. 1-13, impact factor = 3.57
- [23] Fareed Qararyah, **Yousef-Awwad Daraghmi**, Eman Yasser Daraghmi. "Logistic Regression Based Model for Improving the Accuracy and Time Complexity of ROI's Extraction in Real Time Traffic Signs Recognition System," *Journal of Computer Science Research*, volume 01, issue 01, 2018, P.P. 10-15.
- [24] El-Sayed, H.; Sankar, S.; **Yousef-Awwad Daraghmi** .; Tiwari, P.; Rattagan, E.; Mohanty, M.; Puthal, D.; Prasad, M. "Accurate Traffic Flow Prediction in Heterogeneous Vehicular Networks in an Intelligent Transport System Using a Supervised Non-Parametric Classifier," *Sensors* 2018, volume 18, issue 6, P.P. 1668-1696.
- [25] Motaz Daadoo, **Yousef-Awwad Daraghmi**, "Smart Water Leakage Detection Using Wireless Sensor Networks," *International Journal of Networks and Communications*, volume 7, issue 1, February 2017, P.P. 1-16.
- [26] Ahmad Hasasneh, **Yousef-Awwad Daraghmi**, Nabil Hasasneh, "Towards Accurate Real-Time Traffic Sign Recognition Based on Unsupervised Deep Learning of Spatial Sparse Features: A Perspective," *International Journal of Computer and Information Technology*, volume 06, Issue 01, January 2017, P.P. 32-36
- [27] Motaz Daadoo, **Yousef-Awwad Daraghmi**, "Design and Implementation of Low Cost Computer Numerical Control-Printed Circuit Boards Drilling Machine," *International Journal of Engineering and Innovative Technology (IJEIT)*, volume 5, Issue 10, April 2016, p. 63 -67
- [28] **Yousef-Awwad Daraghmi**, Ahmad Hasaneh, "Accurate Real-Time Traffic Sign Recognition Based on the Connected Component Labeling and the Color Histogram Algorithms," *International Journal of Signal Processing Systems*, volume 4, issue 5, October 2016, P.P. 417-421.
- [29] **Yousef-Awwad Daraghmi**, Motaz Daadoo, "Improved Dynamic Route Guidance based on Holt-Winters-Taylor method for Traffic Flow Prediction," *International Journal of Traffic and Transportation Engineering*, Volume 4, issue 3, 2015, P.P 75-83.
- [30] **Yousef-Awwad Daraghmi**, Chih-Wei Yi, Tsun-Chieh Chiang, "Negative Binomial Additive Models for Short-Term Traffic Flow Forecasting in Urban Areas," *IEEE transaction on*

Intelligent Transportation Systems, volume 15, issue 2, April 2014, P.P. 784-793. impact factor = 6.492

- [31] **Yousef-Awwad Daraghmi**, Ivan Stojmenovic, Chih-Wei Yi, "Forwarding Methods in Data Dissemination and Routing Protocols for Vehicular Ad Hoc Networks," *IEEE Network*, volume 27, issue 6, November 2013, P.P. 74-79.
- [32] **Yousef-Awwad Daraghmi**, Ivan Stojmenovic, Chih-Wei Yi, "A Taxonomy of Data Communication Protocols for Vehicular Ad Hoc Networks," *Mobile Ad Hoc Networking: Cutting Edge Directions, Second Edition, Wiley-IEEE Press*, March 2013.
- [33] **Yousef-Awwad Daraghmi**, Chia-Feng Lin, Hsieng-Tang Lin, Shyan-Ming Yuan, "The Construction of Information Gathering with SMS Messages," *WSEAS Transactions on Communications (EI)*, volume 5, issue 6, June 2006, P.P. 1208-1213.

Conference Proceedings

- [34] Muhammed Saffarini, Amjad Rattroot, Yousef-Awwad Daraghmi, Muath Sabha, "Road Roughness and ranking using Deep learning," 12th International Conference on New Technologies, Artificial Intelligence and Smart Data (INTIS 2024), May, 2024
- [35] **Yousef-Awwad Daraghmi**, "Vehicle Speed Monitoring System Based on Edge Computing," *International Conference on Promising electronic Technologies*, Nov 2021
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