Dr. Saed Tarapiah

Associate Professor, Department of Electrical and Computer Engineering, An-Najah National University, Nablus, Palestine

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Academic Profile

Associate Professor at An-Najah National University working within the Department of Electrical and Computer Engineering, with academic duties and research contributions strongly aligned with Computer Engineering, Communication and Computer Networks, Artificial Intelligence, cybersecurity, Internet of Things, embedded systems, and applied machine learning. His academic foundation includes a B.Sc. in Computer Engineering, followed by graduate research in wireless systems and electronics/communication networks, providing a coherent academic trajectory for promotion consideration within the Computer Engineering field.

The recent research record demonstrates active scholarly productivity across published, accepted, preprint, revised, and under-review work in indexed and impact-factor venues. The work is particularly relevant to Computer Engineering and Artificial Intelligence through contributions in AI-enabled cybersecurity, LLMs, DevSecOps, edge AI, IoT systems, embedded/FPGA-based design, computer networks, medical AI, smart infrastructure, and data-driven engineering applications.

Research Strengths and Scientific Contribution

- Strong continuity between the candidate's Computer Engineering background, wireless/mobile communication specialization, and recent applied research in Artificial Intelligence, AI-assisted networking, cybersecurity, edge computing, IoT, embedded systems, smart systems, medical AI, and digital engineering applications.
- Recent papers show methodological diversity: comparative ML/LLM benchmarking, DevSecOps security pipelines, reinforcement learning decision agents, FPGA-based Kalman filtering, cross-view Transformer modeling, wearable-sensor analytics, hedonic modeling, and multi-sensor data fusion.
- Research outputs include published journal articles, accepted papers, Scopus-indexed journal venues, IEEE-related conference proceedings, impact-factor journals, and manuscripts under active review or under consideration.
- Several recent works demonstrate leadership or direct contribution as first author, corresponding author, or core contributor, with clear relevance to Computer Engineering, Artificial Intelligence, cybersecurity, communication and computer networks, embedded/IoT systems, and smart technologies.

Current Position

Associate Professor, Department of Electrical and Computer Engineering, An-Najah National University, Nablus, Palestine (April 2019 - Present). Academic work is centered on Computer Engineering, Communication and Computer Networks, and Artificial Intelligence-oriented teaching and research.

Education

- Ph.D. Program / Doctoral Studies in Electronics Engineering, Politecnico di Torino, Turin, Italy (January 2008 - January 2011). Conducted within the SIPD joint doctorate school operated by Politecnico di Torino, Politecnico di Bari, and Politecnico di Milano.
- M.Sc. in Wireless Systems and Related Technologies, Department of Electronics, Politecnico di Torino, Turin, Italy (September 2006 - September 2007). TOPMED project; graduated with honour; first order; grade 27.8/30.
- B.Sc. in Computer Engineering, College of Engineering, An-Najah National University, West Bank, Palestine (September 2000 - May 2005). Graduated with honour; third order; grade 83.4/100.

Academic and Professional Experience

- Associate Professor, Department of Electrical and Computer Engineering, An-Najah National University, Nablus, Palestine (April 2019 - Present). Teaching and research activities are strongly aligned with Computer Engineering, communication/computer networks, Artificial Intelligence, cybersecurity, IoT, and embedded systems.
- Assistant Professor, Department of Electrical and Computer Engineering, An-Najah National University, Nablus, Palestine (September 2011 - April 2019). Academic duties included teaching and supervision in communication engineering, computer networks, computer engineering-related courses, and applied engineering systems.
- Assistant Professor, Communication Engineering Department, Palestine Technical University - Kadoorie, Tulkarm, Palestine (June 2011 - September 2011), with teaching and academic work connected to communication and computer engineering foundations.
- Teaching and Research Assistant, Computer Engineering Department, College of Engineering, An-Najah National University, Palestine (August 2005 - September 2006).

International Research and Career Experience

- Istituto Superiore Mario Boella (ISMB), Turin, Italy - Pervasive Technologies Research Area, with research exposure to Internet of Things technologies (June 2014 - August 2014).
- INRIA Mediterranee Research Centre, Sophia Antipolis, France - research activity in performance analysis and control of networks (August 2009 - July 2010).
- Telecom Italia Labs (TIM), Turin, Italy - AROMA project on Radio Resource Management in Heterogeneous Wireless Networks (June 2007 - November 2007).

Research Awards and Scientific Distinctions

Priority Scientific Research Awards

- 2022 - Recipient of the Scientific Research Award, Deanship of Scientific Research, An-Najah National University, as listed in the official Scientific Research Awards winners list.
- 2023 - Recipient of the Scientific Research Award, Deanship of Scientific Research, An-Najah National University, as listed in the official Scientific Research Awards winners list.
- 2024 - Recipient of the Scientific Research Award, Deanship of Scientific Research, An-Najah National University, as listed in the official Scientific Research Awards winners list.
- 2025/2026 - Recipient of the Scientific Research Award, Deanship of Scientific Research, An-Najah National University, as listed in the official Scientific Research Awards winners list.

Scopus H-Index Scientific Distinctions

- 2022 - Recognized for achieving the Highest H-Index according to Scopus data within the Communications Engineering and Electrical Engineering specialization in the Department of Electrical and Computer Engineering, as listed by the Deanship of Scientific Research at An-Najah National University.
- 2023 - Recognized for achieving the Highest H-Index according to Scopus data within the Communications Engineering and Electrical Engineering specialization in the Department of Electrical and Computer Engineering, as listed by the Deanship of Scientific Research at An-Najah National University.

Other Awards, Scholarships, and Grants

- Winner of the Pioneers E-learning Award.
- Winner of the ZAMALEH scholarship for a scientific research visit to ISMB, Italy.
- Winner of the SIPD scholarship during the Ph.D. period.
- Winner of the Universita Italo Francese (UIF) 2009 travel grant.
- Winner of the TOPMED scholarship during the M.Sc. period.
- Winner of the Belgian program scholarship during the B.Sc. period.

Teaching Portfolio

Teaching activities are substantially aligned with Computer Engineering and Artificial Intelligence, including undergraduate courses in computer networks, telecommunication networks, programming, networking labs, graduation projects, research skills, and engineering laboratories, in addition to graduate-level teaching and supervision connected to AI-enabled systems, telecommunications, cybersecurity, data-driven engineering, and the Master of Artificial Intelligence context.

Bachelor Courses

Cellular Communication Systems; Multimedia Communication; Telecommunication Networks; Random Variables and Probability; Electrical Circuits I; Communication Lab; Electrical Circuits Lab; Electrical and Electronic Circuits Lab; Internship; Graduation Project I; Graduation Project II; Advanced Telecommunication Networks; Networking Lab; C++ Programming Language; Computer Networks I; Critical Thinking and Research Skills.

Master Courses

- Research Methods.
- Evaluation of Telecommunication Networks.

Master Thesis Supervision

- Managerial Approach Toward Enhance Agriculture Management: Based on New Technology Methods, An-Najah National University, Nablus, Palestine.
- Analyzing the Service Management Functions in Virtualized Evolved Packet Core (vEPC), An-Najah National University, Nablus, Palestine.
- Smart Agriculture: An Approach towards Better Agriculture Management, An-Najah National University, Nablus, Palestine.
- Developing Strategic Plan for Sharing Sites Hardware Location and Infrastructure for Mobile Operators in Palestine, An-Najah National University, Nablus, Palestine.

- Evaluating the Effectiveness of Large Language Models (LLMs) Compared to Machine Learning (ML) in Identifying Phishing Emails Detection, An-Najah National University, Nablus, Palestine.

External Examiner for Master's Theses

- Improving Energy Efficiency in 5G Ultra-Dense Network, Birzeit University, Birzeit, Palestine.
- G-Readiness, University of Dubai, Dubai, United Arab Emirates.
- User Driven Cell Association in 5G HetNets for Mobile and IoT Devices, Birzeit University, Birzeit, Palestine.

Academic Service, Editorial Activity, and Professional Memberships

- Member, Institute of Electrical and Electronics Engineers (IEEE).
- Editorial board member, International Journal of Information and Communication Sciences.
- Programming Committee Member, Computer Science & Engineering: An International Journal (CSEIJ) and related AIRCC conferences.
- Programming Committee Member, International Journal of Instrumentation and Control Systems (IJICS).
- Programming Committee Member, Computer Applications: An International Journal (CAIJ).
- Programming Committee Member, 5th International Conference on Computer Science and Information Technology (CoSIT 2018).
- Programming Committee Member, 5th International Conference on Signal and Image Processing (SIGL 2018).
- Editorial board member, International Journal of Applied Control, Electrical and Electronics Engineering (IJACEEE).
- Editorial board member, Renewable and Sustainable Energy: An International Journal (RSEJ).
- Editorial board member, International Journal of Microelectronics Engineering (IJME).
- Editorial board member, International Journal of Education (IJE).
- Member, Network of Excellence Euro-NF.
- Member, Palestinian Engineers Association.
- Member, Society of Digital Information and Wireless Communications (SDIWC).
- Member, Palestinian Scientific Society for Innovation and Development.
- Reviewer, Eng. Zuhair Hijjawi Award for Scientific Research.
- Reviewer, ASTES Journal.
- Reviewer, Fifth International Conference on Informatics and Applications (ICIA 2016), Kagawa University, Japan.
- Member, Advisory and Editorial Board, Circulation in Computer Science (CCS Archive Journal).
- Reviewer, IEEE Vehicular Technology Conference (VTS).
- Referee, Palestine Science and Technology Fair (PSTF).
- Elected member, College Council for faculty members, Faculty of Engineering and Information Technology.
- Registered reviewer/user, Editorial Manager system for Sustainable Cities and Society.
- Member, Scientific and Research Committee within the Department of Electrical and Computer Engineering, An-Najah National University.
- SSR Committee member for the Communications Engineering Program within the Department of Electrical and Computer Engineering, academic year 2024-2025.
- Quality Control Committee member for the Communications Engineering Program within the Department of Electrical and Computer Engineering, academic year 2024-2025.

Professional Certifications and Training

- Training on Routers Programming and Software Management, Palestinian Telecom (PALTEL), Palestine (June 2004 - August 2004).
- CCNA Trainer, Cisco Academy, Palestine (March 2006).
- EON-XR Certified, Certificate of Completion of EON-XR Educator Course (March 2022).
- Scientific Writing, Politecnico di Torino, Turin, Italy (May 2010).
- E-learning skills based on Moodle, An-Najah National University, Nablus, Palestine (August 2014).
- Competency-Based Learning, An-Najah National University, Nablus, Palestine (August 2021).

Computer and Technical Skills

- Programming and simulation: Oracle, Visual C++, Java, NS2, MATLAB, gnuplot, xfig.
- Document preparation and research tools: LaTeX, BibTeX, and common productivity packages.
- Hardware and embedded systems: microcontroller programming and interfacing.

Publication Record

The publication record supports a promotion profile in Computer Engineering, with strong concentration in AI-enabled systems, cybersecurity, computer and communication networks, IoT, embedded and FPGA-based systems, smart sensing, medical AI, and applied machine learning. Recent outputs also demonstrate alignment with the university's academic direction toward Artificial Intelligence and interdisciplinary engineering research.

Refereed Journal Publications

1. Tarapiah, Saed, Linda Abbas, Oula Mardawi, Shadi Atalla, Yassine Himeur, and Wathiq Mansoor. 2025. "Evaluating the Effectiveness of Large Language Models (LLMs) Versus Machine Learning (ML) in Identifying and Detecting Phishing Email Attempts." Algorithms 18, no. 10: 599. https://doi.org/10.3390/a18100599
2. Tarapiah, Saed; Sulaiman, Batoul; Natsheh, Emad; Atalla, Shadi; Abu Kharmeh, Suleiman; and Rashed, Abdallah. (2025). Optimized indoor radio signal prediction with 3D ray tracing model at 2.4 and 5 GHz. Bulletin of Electrical Engineering and Informatics, 14, 2935-2946. https://doi.org/10.11591/eei.v14i4.9441
3. Tarapiah, S. (2025). Optimizing Cluster Head Selection Algorithms to Improve Power Efficiency in Agricultural Wireless Sensor Networks. Journal of Computer Science, 21(4), 779-786. https://doi.org/10.3844/jcssp.2025.779.786
4. Kasri, W.; Himeur, Y.; Alkhazaleh, H. A.; Tarapiah, S.; Atalla, S.; Mansoor, W.; and Al-Ahmad, H. From Vulnerability to Defense: The Role of Large Language Models in Enhancing Cybersecurity. Computation 2025, 13, 30. https://doi.org/10.3390/computation13020030
5. Abu Kharmeh, S.; Natsheh, E.; Sulaiman, B.; Abuabiah, M.; and Tarapiah, S. Indoor WiFi-Beacon Dataset Construction Using Autonomous Low-Cost Robot for 3D Location Estimation. Applied Sciences 2023, 13, 6768. https://doi.org/10.3390/app13116768
6. Sulaiman, B.; Tarapiah, S.; Natsheh, E.; Atalla, S.; Mansoor, W.; and Himeur, Y. Radio map generation approaches for an RSSI-based indoor positioning system. Systems and Soft Computing, 5, 2023. https://doi.org/10.1016/j.sasc.2023.200054
7. Atalla, S.; Tarapiah, S.; Gawanmeh, A.; Daradkeh, M.; Mukhtar, H.; Himeur, Y.; Mansoor, W.; Hashim, K. F. B.; and Daadoo, M. IoT-Enabled Precision Agriculture: Developing an Ecosystem for Optimized Crop Management. Information 2023, 14, 205. https://doi.org/10.3390/info14040205
8. Sulaiman, B.; Natsheh, E.; and Tarapiah, S. Towards a better indoor positioning system: A location estimation process using artificial neural networks based on a semi-interpolated database. Journal of Pervasive and Mobile Computing, 81, 2022. https://doi.org/10.1016/j.pmcj.2022.101548
9. Tarapiah, S.; Abdallah, D.; Afaneh, W.; and Atallah, S. M. A. Analysis the Performance of Vehicles Ad Hoc Network. International Journal of Applied Engineering Research, 15(4), 364-371, 2020.
10. Tarapiah, S.; Aziz, K.; and Atalla, S. Analysis the Performance of Vehicles Ad Hoc Network. Procedia Computer Science, 124, 682-690, 2017.
11. Daadoo, M.; Eleyan, D.; Tarapiah, S.; Atalla, S.; and Eleyan, A. Computer Numerical Control-PCB Drilling Machine With Efficient Path Planning - Case Study 2. Automatic Control and Computer Science, Issue No. 2, January 2018.
12. Tarapiah, S.; Daadoo, M.; and Atalla, S. Android-based real-time healthcare system. International Journal of Medical Engineering and Informatics, 9(3), 253-268, 2017.
13. Tarapiah, S.; Atalla, S.; and Daadoo, M. Dimensioning mobile WiMAX network: A case study. ARPN Journal of Engineering and Applied Sciences, 12(2), 462-470, 2017.
14. Daadoo, M.; Tarapiah, S.; and Atalla, S. Evaluating Efficiency of Multi-Layered Switch Architecture in All-Optical Networks. International Journal of Applied Engineering Research, 11(22), 11030-11036, 2016.
15. Daadoo, M.; Atallah, S. M. A.; and Tarapiah, S. Development of Low Cost Safety Home Automation System using GSM Network. European Journal of Social Sciences, 53(3), 338-353, 2016.
16. Daadoo, M.; Tarapiah, S.; and Atallah, S. M. A. Analysis and Performance of a Low Cost Multiple Alarm Security System for Smart Home Based on GSM Technology and Controlling Based on Android Smartphone. European Journal of Scientific Research, 143(2), 136-165, 2016.
17. Atalla, S.; Tarapiah, S.; El Hendy, M.; and Hashim, K. F. B. Smart Algorithms for Hierarchical Clustering in Optical Network. International Journal of Communication Networks and Information Security (IJCNIS), 8(2), 2016.
18. Tarapiah, S.; Atalla, S.; Hashim, K. F. B.; and Daadoo, M. Mobile Network Planning Process Case Study - 3G Network. Applied Sciences, 9(3), 2016.
19. Tarapiah, S.; Aziz, K.; and Atalla, S. Third Generation (3G) Mobile Network Planning Process and Methodology - Case Study. International Journal of Computer Applications, June 2016.
20. Tarapiah, S.; Aziz, K.; and Atalla, S. Smart Real-Time Healthcare Monitoring and Tracking System using GSM/GPS Technologies. International Journal of Computer Applications, May 2016.
21. Aziz, K.; Tarapiah, S.; Alsaedi, M.; Haj Ismail, S.; and Atalla, S. Wireless Sensor Networks for Road Traffic Monitoring. International Journal of Advanced Computer Science and Applications (IJACSA), 6(11), 2015.
22. Tarapiah, S.; Aziz, K.; and Atalla, S. Common Radio Resource Management Algorithms in Heterogeneous Wireless Networks with KPI Analysis. International Journal of Advanced Computer Science and Applications (IJACSA), 6(10), 53-58, 2015.
23. Tarapiah, S.; Aziz, K.; and Atalla, S. Radio Resource Management in Heterogeneous Networks, Functional Models and Implementation Requirements. International Journal of Computer Applications, 127(16), 1-4, 2015.
24. Tarapiah, S.; Aziz, K.; and Atalla, S. Advanced Radio Resource Management Solutions for Multi-Access Wireless and Mobile Technologies. International Journal of Enhanced Research in Science, Technology and Engineering, 4(9), 165-169, 2015.
25. Tarapiah, S.; Aziz, K.; and Atalla, S. Performance Evaluation of Network Coding in Wireless Ad Hoc Networks. International Journal of Engineering and Innovative Technology, 4(11), 17-24, 2015.
26. Tarapiah, S.; and Atalla, S. Public Transportation Management System based on GPS/WiFi and Open Street Maps. International Journal of Advanced Computer Science and Applications (IJACSA), 6(1), 2015.
27. Tarapiah, S.; Atalla, S.; and Masri, A. Analysis the Performance of Network Coding for Ad Hoc Networks in Realistic Simulation Scenarios. International Journal of Computer Applications, 85(10), 13-20, January 2014.
28. Masri, A.; Tarapiah, S.; and Dama, Y. Secondary User Power Saving in Overlay Cognitive Radio Networks. International Journal of Computer Applications, 86(7), 1-5, January 2014.
29. Tarapiah, S.; Atalla, S.; and AbuHania, R. Smart On-Board Transportation Management System Using GPS/GSM/GPRS Technologies to Reduce Traffic Violation in Developing Countries. International Journal of Digital Information and Wireless Communications (IJDIWC), 3(4), 96-105, 2013.
30. Acer, U.; Giaccone, P.; Hay, D.; Neglia, G.; and Tarapiah, S. Timely Data Delivery in a Realistic Bus Network. IEEE Transactions on Vehicular Technology, 61(3), 2012.

Refereed Conference Publications

31. Tarapiah, S.; Aziz, K.; and Atalla, S. Analysis the Performance of Vehicles Ad Hoc Network. Information Systems International Conference (ISICO), Bali, Indonesia, November 2017.
32. Aziz, K.; Tarapiah, S.; and Atalla, S. SIMSSP: Secure Instant Messaging System for Smart Phones. SAI Intelligent Systems Conference (IntelliSys), London, UK, 21-22 September 2016.
33. Aziz, K.; Tarapiah, S.; Haj Ismail, S.; and Atalla, S. Smart Real-Time Healthcare Monitoring and Tracking System using GSM/GPS Technologies. IEEE International Conference on Big Data and Smart City (ICBDSC), Muscat, 15-16 March 2016.
34. Tarapiah, S.; Atalla, S.; Mulla, N.; and Tarabeh, S. Offline Public Transportation Management System Based on GPS/WiFi and Open Street Maps. 6th International Conference on Computational Intelligence, Communication Systems and Networks (CICSyN), Tetovo, Macedonia, May 2014.
35. Tarapiah, S.; Atalla, S.; and Alsayid, B. Smart On-Board Transportation Management System Geo-Casting Featured. International Conference on Computer Information Systems (ICCIS), Hammamet, Tunisia, January 2014.
36. Tarapiah, S.; AbuHania, R.; Hindi, I.; and Jamal, D. Applying Web Based GPS/GPRS Ticketing and Tracking Mechanism to Reduce Traffic Violation in Developing Countries. International Conference on Digital Information Processing, E-Business and Cloud Computing (DIPECC), Dubai, UAE, October 2013.
37. Acer, U.; Giaccone, P.; Hay, D.; Neglia, G.; and Tarapiah, S. Timely Data Delivery in a Realistic Bus Network. IEEE INFOCOM Mini-Conference, Shanghai, China, April 2011.
38. Campolo, C.; Casetti, C.; Chiasserini, C. F.; and Tarapiah, S. Performance of Network Coding for Ad Hoc Networks in Realistic Simulation Scenarios. 16th ICT International Conference on Telecommunications, Marrakech, Morocco, May 2009.
39. Tarapiah, S.; Campolo, C.; Casetti, C.; and Chiasserini, C. F. Network Coding in Ad Hoc Networks: A Realistic Simulation Study. IEEE INFOCOM, Rio de Janeiro, Brazil, April 2009.

Book Chapter

40. Aziz, K.; Tarapiah, S.; and Atalla, S. (2018). SIMSSP: Secure Instant Messaging System for Smart Phones. In Y. Bi, S. Kapoor, and R. Bhatia (Eds.), Lecture Notes in Networks and Systems, Vol. 16, pp. 647-657. Springer International Publishing.

Technical Reports

41. Acer, U.; Giaccone, P.; Hay, D.; Neglia, G.; and Tarapiah, S. Timely data delivery in a realistic bus network. Technical report, 2010. Available online: http://hal.archives-ouvertes.fr/inria-00547254/en/.
42. Saed, T.; Andrea, B.; Massimo, B.; Per, E.; Robert, F.; Giuseppe, M.; Marco, T.; and Avelina, V. Economic evaluation of novel AROMA RRM/CRRM algorithms and solutions. Telecom Italia Labs, 2007. Available online: http://staff.najah.edu/sites/default/files/AROMA_tech_report.pdf.
43. Sophia Antipolis-Mediterranee team. Models for Performance Analysis and Control of Networks. Technical report, 2009. Available online: http://raweb.inria.fr/rapportsactivite/RA2009/maestro/maestro.pdf.
44. Sophia Antipolis-Mediterranee team. Models for Performance Analysis and Control of Networks. Technical report, 2010. Available online: https://pdfs.semanticscholar.org/f284/29726a27a6261bfe0b50155b05f34ee1f1f7.pdf.
45. Sophia Antipolis-Mediterranee team. Activity Report: Models for the performance analysis and the control of networks. Technical report, 2011. Available online: https://raweb.inria.fr/rapportsactivite/RA2011/maestro/maestro.pdf.

Recent Research Publications and Manuscripts

The following recent publications and manuscripts are included as additional evidence of sustained scholarly productivity, research quality, and relevance to the candidate's fine specialization. They reflect peer-reviewed published work, accepted papers, preprint outputs, revised submissions, and manuscripts under review or under consideration in indexed, impact-factor, or academically recognized venues.

46. Evaluating the Effectiveness of Large Language Models (LLMs) Versus Machine Learning (ML) in Identifying and Detecting Phishing Email Attempts. Published | Algorithms | 25 Sep 2025 | Journal | Metric/indexing: 2.1 | Applicant order: 1/6 | Corresponding author: Yes. Peer-reviewed MDPI journal article with DOI. The study advances AI-driven cybersecurity by benchmarking LLM-based and ML-based approaches for phishing email detection and supporting practical detection performance evaluation. Impact factor: 2.1.
47. A Multi-Sensor Data Fusion Framework for Natural Disaster Mitigation and Recovery. Accepted | IGARSS 2026 / IEEE Xplore Proceedings | Accepted: 19 Mar 2026 | Conference | Applicant order: 7/7 | Corresponding author: No. Accepted by the IGARSS 2026 Technical Program Committee for presentation. The paper contributes a multi-sensor data-fusion framework for natural-disaster mitigation and recovery, with relevance to remote sensing, emergency response, and decision-support systems.
48. Indoor Environmental Quality as an Incremental Signal in Residential Valuation Using Hedonic Modeling. Accepted | Buildings (MDPI) | Accepted: 28 Apr 2026 | Journal | Metric/indexing: 3.1 | Applicant order: 5/5 | Corresponding author: No. Accepted peer-reviewed MDPI journal article in Buildings, a JCR Q2 journal in Engineering, Civil. The study applies hedonic modeling and indoor environmental quality indicators to residential valuation, contributing to data-driven built-environment and real-estate analytics. Impact factor: 3.1.
49. Design and Implementation of a Digital Video Asset Management and Broadcasting Framework for Television Stations. Published online as Preprint | International Journal of Computing and Digital Systems / University of Bahrain Repository | Issued online: 26 Apr 2026 | Journal article / Preprint | Metric/indexing: Indexed in Scopus database | Applicant order: 1/1 | Corresponding author: Yes. Published online in the University of Bahrain repository as a preprint article with DOI: 10.12785/ijcds/15712. The paper presents a practical digital video asset management and broadcasting framework for television-station workflows, supported by experimental evaluation of transfer time, adaptive streaming, metadata governance, and operational scalability. Indexed in Scopus database.
50. Multimodal Edge AI for Productivity Analytics and Scheduling Support in Construction Projects. Re-published / Preprint | IEEE Access / Preprint | Re-published / preprint version: 2026 | Journal / Preprint | Metric/indexing: 3.6 | Applicant order: 5/5 | Corresponding author: No. Re-published / preprint work focused on multimodal edge AI for productivity analytics and scheduling support in construction projects. The study contributes to

applied AI, edge intelligence, and construction-process optimization through data-driven productivity and scheduling support. Impact factor of intended journal outlet: 3.6.

51. Virtualized Evolved Packet Core Deployment Strategies in Emerging Palestinian Mobile Networks. Minor revision completed / Round 2 review | TELKOMNIKA (Telecommunication Computing Electronics and Control) | Submitted: 3 Feb 2026; revised version uploaded: 3 Apr 2026; Round 2: 9 Apr 2026; last modified: 29 Apr 2026 | Journal | Metric/indexing: Indexed in Scopus database | Applicant order: 1/3 | Corresponding author: Yes. Minor revision completed and submitted with a detailed point-by-point response to reviewers. The paper addresses virtualized EPC deployment strategies for emerging Palestinian mobile networks, emphasizing telecom virtualization, deployment trade-offs, and infrastructure implications. Indexed in Scopus database.
52. Hybrid DevSecOps Framework for Python Vulnerability Detection Using Static Analysis, LLMs, and Reinforcement Learning. Revised version submitted | 1st Palestine Conference on Cybersecurity & Artificial Intelligence (PCSAi) | Revised version submitted: May 2026 | Conference | Applicant order: 3/3 | Corresponding author: No. Revised version submitted after reviewer comments. The paper proposes a hybrid DevSecOps framework integrating static analysis, LLM semantic analysis, and reinforcement learning for Python vulnerability detection in CI/CD pipelines.
53. Fall Risk Assessment Using Gait Analysis and Wearable Sensors: A Machine Learning Approach. Submitted / under automated or initial review | IEEE Access | Submitted: 14 Jan 2026 | Journal | Metric/indexing: 3.6 | Applicant order: 6/6 | Corresponding author: No. Journal submission to IEEE Access. The study applies gait analysis, wearable sensors, and machine learning for fall-risk assessment, contributing to smart healthcare, assistive monitoring, and AI-enabled risk prediction. Impact factor: 3.6; 5-year impact factor: 3.9.
54. On-Device Leukemia Prediction from Microscopic Blood Smears with Lightweight CNNs and Transfer Learning. Submitted / under automated or initial review | IEEE Access | Submitted: 15 Feb 2026 | Journal | Metric/indexing: 3.6 | Applicant order: 7/8 | Corresponding author: No. Journal submission to IEEE Access, Engineering in Medicine and Biology Society Section. The study proposes lightweight CNN and transfer-learning methods for on-device leukemia prediction from microscopic blood smears, emphasizing deployable medical AI and edge-healthcare applications. Impact factor: 3.6; 5-year impact factor: 3.9.
55. Hardware-Software Co-Design of a Dual-Axis Solar Tracker with FPGA-Based Kalman Filtering. Under consideration / under review | Journal of Circuits, Systems and Computers | Under review; Manuscript No.: WSPC-JCSC-D-26-00064 | Journal | Metric/indexing: 2024 Impact Factor: 1.0 | Applicant order: 3/5 | Corresponding author: No. Research Paper under review. The study presents a hardware-software co-design for a dual-axis solar tracker integrating FPGA-based Kalman filtering, embedded PID control, wireless monitoring, and IoT-enabled renewable-energy instrumentation. 2024 Impact Factor: 1.0.
56. CGTFormer: A Clinically Guided Cross-View Transformer for Anatomically Structured Representation Learning from Axial, Coronal, and Sagittal MRI in Joint Alzheimer’s Disease Classification and MMSE Prediction. Under consideration / under review | Intelligent Medicine | Under review; Manuscript No.: IMED-D-26-00194 | Journal | Metric/indexing: Impact Factor: 6.9 | Applicant order: 7/7 | Corresponding author: No. Research Article under review. The paper proposes CGTFormer, a tri-planar MRI Transformer framework for joint Alzheimer's disease classification and MMSE prediction, integrating multi-view learning, cross-view attention, and clinically meaningful neuroimaging representation. Impact factor: 6.9.
57. Understanding Enterprise AI Resistance Through the Region Beta Paradox: A Psychological Lens for Human-Centered Adoption. Under consideration / planned submission | International Journal of Information Management (IJIM) | Prepared manuscript: 2026 | Journal | Metric/indexing: 27 | Applicant order: 2/3 | Corresponding author: No. Prepared manuscript for intended submission to the International Journal of Information Management. The study introduces the Region Beta Paradox as a psychological lens for enterprise AI resistance and human-centered adoption, supported by exploratory empirical evidence from R&D academic and industry contexts. Impact factor: 27.