Dr. Saed TARAPIAH

Communication Engineering Department, An-Najah National University, Nablus, Palestine
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CURRENT POSITION
Associate professor at Communication Engineering Department, An- Najah National University, April 2019 – Present

EDUCATION
- January 2008 - January 2011 "Politecnico di Torino" – Turin, Italy
    Ph.D. student, Department of Electronics Engineering, (SIPD joint doctorate school which runs by the three Italian Technical universities, the Politecnico di Torino (coordinator of the project), the Politecnico di Bari and the Politecnico di Milano, offer joint PhD programs of high qualifications).

- September 2006 - September 2007 "Politecnico di Torino" – Turin, Italy
    M.Sc. degree in wireless systems and related technologies from the Electronics Department (TOPMED project, with honour, first order, with grade 27.8/30).

- September 2000 - May 2005 "An-Najah National University" – West bank, Palestine
    B.Sc. Degree from the Computer Department, College of Engineering (with honour, third order 83.4/100).

WORK EXPERIENCE
- Since April 2019
     "An-Najah National University" - Nablus, Palestine
     Working with the Department of Communication engineering as an associate professor.

- September 2011 – April 2019
     "An-Najah National University" - Nablus, Palestine
     Working with the Department of Communication engineering as an assistant professor.

- June 2011 – September 2011
     "Palestine Technical University - Khadoori" - West bank, Tulkarem
     Working with the Department of Communication Engineering as an assistant professor.

- August 2005 – September 2006
     "An-Najah National University" - West bank, Palestine
     Teacher and research assistant in the Computer Department, College of Engineering.

Certifications or professional registrations
- June 2004 – August 2004
     "Palestinian Telecom (PALTEL)" – Palestine
     Training on Routers Programming and Software Management.

- March 2006
    "CISCO Academy" – Palestine
     CCNA trainer

- March 2022
  "certificate of completion of EON-XR Educator Course"
  EON-XR Certified

ADDITIONAL CAREER EXPERIENCE - PART TIME

- June 2014 – August 2014
  "Istituto Superiore Mario Boella (ISMB)" Turin, Italy
  Pervasive Technologies Research Area studies and develops technologies enabling the paradigm of Internet of Things (IoT)

- August 2009 – July 2010
  "National Institute for Research in Computer Science and Control (INRIA) Méditerranée Research Centre" - Sophia Antipolis, France

- June 2007 – November 2007
  "Telecom Italia labs, TIM" – Turin, Italy
  AROMA project "Radio Resource Management in Heterogeneous Wireless Networks"

SOCIAL AND ORGANIZATIONAL SKILLS
- Member of the Institute of Electrical and Electronics Engineers (IEEE).
- Editorial board member of International Journal of Information and Communication Sciences.
- Programming Committee Member of Computer Science & Engineering: An International Journal (CSEIJ) as well as PCM member of the related conferences of AIRCC world wide.
- Programming Committee Member of International Journal of Instrumentation and Control Systems (IJICS)
- Programming Committee Member of Computer Applications: An International Journal (CAIJ).
- Programming Committee Member of 5th International Conference on Computer Science and Information Technology (CoSIT 2018).
- Programming Committee Member of 5th International Conference on Signal and Image Processing (SIGL 2018).
- Editorial board member of International Journal of Applied Control, Electrical and Electronics Engineering (IJACEEE).
- Editorial board member of Renewable and Sustainable Energy: An International Journal (RSEJ).
- Editorial board member International Journal of Microelectronics Engineering (IJME).
- Editorial board member of International Journal of Education (IJE).
- Member of Network of Excellence Euro-NF.
- Member of Palestinian Engineers Association.
- Member of Society of Digital Information and Wireless Communications (SDIWC).
- Member of the Palestinian scientific society for innovation and development.
- Reviewer of Eng. Zuhair Hijjawi Award for Scientific Research.
- Reviewer of ASTES Journal (Master list of Thomson Reuters journals).
- Reviewer of The Fifth International Conference on Informatics and Applications (ICIA2016, akamatsu, Japan Kagawa University.

- Member of the Advisory and Editorial Board ("Circulation in Computer Science" CCS Archive Journal).
- Reviewer of IEEE Vehicular Technology Conference VTS.
- Referee at Palestine Science and Technology Fair-PSTF.
- Elected for membership of the College Council for faculty members in the Faculty of Engineering and Information Technology.
- Registered for Editorial Manager (EM), the online submission and peer review tracking system for Sustainable Cities and Society.
- Membership of the Scientific and research Committee of the Department of Electrical Engineering and the Department of Communications Engineering at An-Najah National University.
- SSR Committee Decision for the Communications Engineering Program for the Academic Year 2024 2025
- Quality Control Committee for the Communications Engineering Program for the Academic Year 2024-2025

COMPUTER SKILLS
- Programming Languages: Oracle, Visual C++, Java, NS2, MATLAB, gnuplot, xfig.
- Computer Applications: TEX (LATEX, BibTEX), most common productivity packages.
- Microcontroller Programming and Interfacing.

TRAINING
- Scientific writing, May 2010 "Politecnico di Torino" – Turin, Italy
- E-Learning skills, based on moodle, , August 2014 " An-Najah National University" – Nablus, Palestine.
- Competency based learning, August 2021 " An-Najah National University" – Nablus, Palestine.

AWARDS
- Winner of the Citation Count Award for Published Research in 2022 and 2023 within the Deanship of Scientific Research at An-Najah National University.
- Research Excellence and Publication Quality Award for the year 2023.
- Research Excellence and Publication Quality Award for the year 2022.
- Highest H-Index in the Scopus database in the Departments of Communications Engineering and Electrical Engineering for the year 2023.
- Highest H-Index in the Scopus database in the Departments of Communications Engineering and Electrical Engineering for the year 2022.
- Winner of Pioneers E-learning award.
- Winner of ZAMALEH scholarship, for scientific research visit for ISMB, Italy
- Winner of SIPD program scholarship during the PhD period.
- Winner of "L'Universita Italo Francese (UIF) 2009" travel grant.
- Winner of TOPMED program scholarship during the M.Sc period
- Winner of Belgian program scholarship during the B.Sc period

COURSES TAUGHT:
BACHELOR COURSES:
  (1) Cellular Communication systems, (2) Multimedia Communication, (3) Telecommunication networks, (4) Random Variables and Probability, (5) Electrical Circuits-1, (6) Communication lab, (7) Electrical Circuits Lab, (8) Electrical and Electronic Circuits Lab, (9) Internship, (10) Graduation Project-1, (11) Graduation Project-2 , (12) Advanced Telecommunication Networks, (13) Networking Lab, (14) C++ programming language,(15) Computer Netyworks-1, (16) Critical Thinking and Research Skills

Master COURSES:
  (1) Research Methods
  (2) Evaluation of Telecommunication Networks

MASTER THESIS SUPERVISION:
- Thesis Title: "Managerial Approach Toward Enhance Agriculture Management: Based on New Technology Methods". At An-najah National University, Nablus, West bank, Palestine.
- Thesis Title: "Analyzing the service management functions in Virtualized Evolved Packet Core (vEPC)". At An-najah National University, Nablus, West bank, Palestine.
- Thesis Title: "Smart Agriculture: An Approach towards Better Agriculture Management". At An-najah National University, Nablus, West bank, Palestine.
- Thesis Title: "Developing Strategic Plan for Sharing Sites Hardware Location and Infrastructure for Mobile Operators In Palestine". At An-najah National University, Nablus, West bank, Palestine.
- Thesis Title: "Evaluating the Effectiveness of Large Language Models (LLMs) Compared to Machine Learning (ML) in Identifying Phishing Emails Detection". At An-najah National University, Nablus, West bank, Palestine.

MASTER THESIS EXAMINER:
- Thesis Title: "Improving Energy Efficiency in 5G Ultra-Dense Network". At Birzeit University, Birzeit West Bank, Palestine
- Thesis Title: "G-Readiness". At The University of Dubai, Dubai United Arab Emirates.
- Thesis Title: "USER DRIVEN CELL ASSOCIATION IN 5G HETNETS FOR MOBILE & IOT DEVICES". At Birzeit University, Birzeit West Bank, Palestine.

PUBLICATIONS
REFEREED JOURNALS:

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 & 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. 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.; 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.; Tarapiah, S. Indoor WiFi-Beacon Dataset Construction Using Autonomous Low-Cost Robot for 3D Location Estimation. *Appl. Sci.* 2023, *13*, 6768. https://doi.org/10.3390/app13116768

6. Batoul Sulaiman, Saed Tarapiah, Emad Natsheh, Shadi Atalla, Wathiq Mansoor, Yassine Himeur, "Radio map generation approaches for an RSSI-based indoor positioning system", Systems and Soft Computing, Volume 5, 2023, ISSN 2772-9419, 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.; Daadoo, M. "IoT-Enabled Precision Agriculture: Developing an Ecosystem for Optimized Crop Management". Information 2023, 14, 205. https://doi.org/10.3390/info14040205.

8. B Sulaiman, E Natsheh, S Tarapiah "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, Volume 81, 2022. https://doi.org/10.1016/j.pmcj.2022.101548

9. Saed Tarapiah, Dua' Abdallah, Wafa Afaneh, Shadi M.A Attallah "Analysis the Performance of Vehicles Ad Hoc Network", International Journal of Applied Engineering Research ISSN 0973-4562 Volume 15, Number 4 (2020) pp. 364-371.

10. Saed Tarapiah, Kahtan Aziz, Shadi Atalla "Analysis the Performance of Vehicles Ad Hoc Network", Journal: Procedia Computer Science, volume 124, pages 682-690, 2017/12/31, Publisher: Elsevier.

11. Motaz Daadoo, Derar Eleyan, Saed Tarapiah, Shadi Atalla and Amna Eleyan "Computer Numerical Control-pcb Drilling Machine With Efficient Path Planning – Case Study2 "automatic control and computer science. Issue No. 2, January 2018.

12. Saed Tarapiah, Motaz Daadoo, Shadi Atalla "Android-based real-time healthcare system" International Journal of Medical Engineering and Informatics. Vol.9, No.3 April, 2017, pages 253-268.

13. Saed Tarapiah, Shadi Atalla and, Motaz Daadoo "Dimensioning mobile WiMAX network: A case study" ARPN Journal of Engineering and Applied Sciences. Vol.12, No.2 January, 2017, pages 462-470.

14. Motaz Daadoo, Saed Tarapiah, and, Shadi Atalla "Evaluating Efficiency of Multi-Layered Switch Architecture in All-Optical Networks" International Journal of Applied Engineering Research. Vol.11, No.22 November, 2016, pages 11030-11036.

15. Motaz Daadoo, Shadi M.A Atallah, and Saed Tarapiah " Development of Low Cost Safety Home Automation System using GSM Network "European Journal of Social Sciences". Vol.53, No.3 November, 2016, pages 338-353.

16. Motaz Daadoo, Saed Tarapiah, and, Shadi M.A Atallah "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. Vol.143, No.2 November, 2016, pages 136-165.

17. Shadi Atalla, Saed Tarapiah, Mahmoud El Hendy, and, Kamarul Faizal Bin Hashim " Smart Algorithms for Hierarchical Clustering in Optical Network "International Journal of Communication Networks and Information Security (IJCNIS). Vol.8, No.2 August, 2016.

18. Saed Tarapiah, Shadi Atalla, Kamarul Faizal Bin Hashim, and, Motaz Daadoo" Mobile Network Planning Process Case Study - 3G Network" Canadian Center of Science and Education, Toronto, Canada. Vol.9, No.3 August, 2016.

19. S. Tarapiah, K. Aziz and, S. Atalla,"Third Generation (3G) Mobile Network Planning Process and Methodology - Case Study " International Journal of Computer Applications: June 2016. Published by Foundation of Computer Science, New York, USA. June, 2016.

20. S. Tarapiah, K. Aziz and, S. Atalla, "Smart Real-Time Healthcare Monitoring and Tracking System using GSM/GPS Technologies". International Journal of Computer Applications: May 2016. Published by Foundation of Computer Science, New York, USA. May, 2016.

21. K. Aziz , S. Tarapiah, M. Alsaedi, S. Haj Ismail, S. Atalla. " Wireless Sensor Networks for Road Traffic Monitoring", International Journal of Advanced Computer Science and Applications(IJACSA), 6(11), 2015.

22. S. Tarapiah, K. Aziz and, S. Atalla. " Common Radio Resource Management Algorithms in Heterogeneous Wireless Networks with KPI Analysis" International Journal of Advanced Computer Science and Applications(IJACSA), 6(10), 2015, pages 53-58.

23. S. Tarapiah, K. Aziz and, S. Atalla. " Radio Resource Management in Heterogeneous Networks, Functional Models and Implementation Requirements", "International Journal of Computer Applications (IJCA), October 2015, Vol 127, number 16, pages 1-4.

24. S. Tarapiah, K. Aziz and, S. Atalla. " Advanced Radio Resource Management Solutions for Multi-Access Wireless and Mobile Technologies", "International Journal of Enhanced Research in Science, Technology & Engineering (IJERSTE), September 2015, Vol 4, Issue 9, pages 165-169.

25. S. Tarapiah, K. Aziz and, S. Atalla. "Performance Evaluation of Network Coding in Wireless Ad Hoc Networks", international journal of engineering and innovative technology (IJEIT), May 2015, Vol 4, Issue 11, pages 17-24.

26. S.Tarapiah and, S. Atalla, "Public Transportation Management System based on GPSWiFi and Open Street Maps" International Journal of Advanced Computer Science and Applications(IJACSA), 6(1), 2015.

27. S.Tarapiah, S. Atalla and, A. Masri. Article: "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. Published by Foundation of Computer Science, New York, USA.

28. A. Masri, S.Tarapiah, Y. Dama. Article: "Secondary User Power Saving in Overlay Cognitive Radio Networks". International Journal of Computer Applications 86(7):1-5, January 2014. Published by Foundation of Computer Science, New York, USA.

29. S. Tarapiah, S. Atalla and, R. AbuHania. "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,The Society of Digital Information and Wireless Co.

30. Utku Acer, Paolo Giaccone, David Hay, Giovanni Neglia, Saed Tarapiah. "Timely Data Delivery in a Realistic Bus Network" Journal: IEEE Transactions on Vehicular Technology - IEEE TRANS VEH TECHNOL , vol. 61, no. 3, 2012.

REFEREED CONFERENCES:

31. S. Tarapiah , K. Aziz, S. Atalla. " ANALYSIS THE PERFORMANCE OF VEHICLES AD HOC NETWORK", Information Systems International Conference (ISICO) 2017 November, 2017, Bali, Indonesia.

32. K. Aziz, S. Tarapiah, S. Atalla. "SIMSSP: Secure Instant Messaging System for Smart Phones", IEEE International Conference, SAI Intelligent Systems Conference 2016 - IntelliSys 2016, 21-22 Spetember 2016, London, UK.

33. K. Aziz, S. Tarapiah, S. Haj Ismail, S. Atalla. " Smart Real-Time Healthcare Monitoring and Tracking System using GSM/GPS Technologies", IEEE International Conference on Big Data and Smart City, (ICBDSC) 2016, 15-16 March 2016, Muscat.

34. S.Tarapiah, S. Atalla, N. Mulla and, S. Tarabeh. "Offline Public Transportation Management System Based on {GPS/WiFi} and Open Street Maps", CICSyN2014, 6th Int Conference on Computational Intelligence, Communication Systems and Networks , Tetovo, Macedonia, May 2014.

35. S.Tarapiah and S. Atalla and, B. Alsayid, "Smart On-Board Transportation Management System Geo-Casting Featured," in International Conference on Computer Information Systems 2014 (ICCIS-2014), Hammamet,Tunisia, Jan. 2014.

36. Saed Tarapiah, Rajaa AbuHania, Islam Hindi, Diana Jamal. "Applying Web Based GPS/GPRS Ticketing and Tracking Mechanism to Reduce Traffic Violation in Developing Countries", The International Conference on Digital Information Processing, E-Business and Cloud Computing (DIPECC2013), 2013, Dubai, UAE. October 2013.

37. Utku Acer, Paolo Giaccone, David Hay, Giovanni Neglia, Saed Tarapiah. "Timely Data Delivery in a Realistic Bus Network", IEEE INFOCOM (MiniConference), 2011, Shanghai, China. April 2011.

38. Claudia Campolo, Claudio Casetti, Carla-Fabiana Chiasserini, Saed Tarapiah. (2009). "Performance of Network Coding for Ad Hoc Networks in Realistic Simulation Scenarios", on the proceedings of the 16th ICT international conference on telecommunications, May 2009, Marrakech, Morocco.

39. Saed Tarapiah, Claudia Campolo, Claudio Casetti, Carla-Fabiana Chiasserini. (2009). "Network Coding in Ad Hoc Networks: a Realistic Simulation Study", IEEE INFOCOM 2009. Rio de Janeiro, Brazil. April 2009.

BOOK CHAPTERs:

40. Aziz, Kahtan, Tarapiah, Saed and Atalla, Shadi. 2018. SIMSSP: Secure Instant Messaging System for Smart Phones. [book auth.] Yaxin Bi, Kapoor Supriya and Bhatia Rahul. Lecture Notes in Networks and Systems. Vol 16, pages: 647-657, Gewerbestrasse, Switzerland : Springer International Publishing, 2018.

TECHNICAL REPORTS:

41. U. Acer, P. Giaccone, D. Hay, G. Neglia, and S. Tarapiah. "Timely data delivery in a realistic bus network". Technical report, 2010. Available online at: http://hal.archives-ouvertes.fr/inria-00547254/en/.

42. T Saed, B Andrea, B Massimo, E Per, F Robert, M Giuseppe, T Marco, V Avelina. "Economic evaluation of novel AROMA RRM/CRRM algorithms and solutions", Telecom Italia Labs, 2007. Available online at: http://staff.najah.edu/sites/default/files/AROMA_tech_report.pdf.

43. Sophia Antipolis-Méditerranée team, "Models for Performance Analysis and Control of Networks" Technical report, 2009, available online at: http://raweb.inria.fr/rapportsactivite/RA2009/maestro/maestro.pdf

44. Sophia Antipolis-Méditerranée team, "Models for Performance Analysis and Control of Networks" Technical report, 2010, available online at: https://pdfs.semanticscholar.org/f284/29726a27a6261bfe0b50155b05f34ee1f1f7.pdf

45. Sophia Antipolis-Méditerranée team, "Activity Report: Models for the performance analysis and the control of networks" Technical report, 2011, available online at: https://raweb.inria.fr/rapportsactivite/RA2011/maestro/maestro.pdf