Mohammed JOUHARI

mohammed.jouhari1@uit.ac.ma +212 6 52 60 31 59
LinkedIn Profile Google Scholar Profile
Scopus ID: 57189074563
ORCID: 0000-0001-5406-8594

Professional Experience

2024 – Present **Assistant Professor,** *Faculty of Sciences, Ibn Tofail University, Kenitra*

- Teaching courses in cybersecurity, distributed systems, and intelligent networks.
- Supervising Master's theses and doctoral dissertations.
- Engaged in IoT and sensor network research projects and co-organizer of scientific events and workshops.

2023 – 2024 **Assistant Professor,** *Moroccan School of Engineering Sciences (EMSI), Tangier*

- Delivered courses on Unix systems, application security, and virtualization.
- Supervised undergraduate final-year projects.
- Contributed to the development of curricula and innovative teaching methods.

2021 – 2023 **Postdoctoral Researcher,** *Mohammed VI Polytechnic University (UM6P)*

- Conducted research on machine learning for energy-efficient IoT and sensor networks.
- Published results in indexed journals and presented at international conferences.
- Collaborated with national and international research teams.

2020 – 2021 **Postdoctoral Researcher,** *Qatar University*

- Developed AI-based methods for drones and intelligent surveillance systems.
- Coordinated funded projects and contributed to joint international publications.
- Supervised Master's students in computer science.

2017 – 2020 **Adjunct Lecturer,** *Ibn Tofail University, Kenitra*

- Taught courses in data security, VoIP, and IPv6 for undergraduate and graduate students.
- Conducted research on underwater wireless sensor networks.
- Supervised research projects and Master's theses.

Education

2014 – 2019 **National PhD in Mathematics, Computer Science, and Applications,** *Ibn Tofail University, Faculty of Sciences, Kenitra*
Dissertation title: *"Advances in Underwater Wireless Sensor Networks: Improvements in MAC Layer, Topology Control, and Geographic Routing Protocols."*
Supervisor: Prof. Khalil Ibrahimi
Distinction: Highest honors with congratulations of the examination committee

Education (continued)

2011 – 2013 **Master's Degree in Computer Science, Signals, and Telecommunications (Research Track),** *Mohammed V University, Faculty of Sciences, Rabat*
Distinction: Fairly Good

2009 – 2011 **Bachelor's Degree in Fundamental Studies in Physics,** *Mohammed V University, Faculty of Sciences, Rabat*

2007 – 2008 **Baccalaureate in Experimental Sciences,** *Ibn Rochd High School, Temara*

Publications

International Journals (indexed in Scopus)

1. H. Benaddi, M. Jouhari, and O. Elharrouss, "A lightweight hybrid approach for intrusion detection systems using a chi-square feature selection approach in iot," *Internet of Things*, vol. 32, p. 101 624, 2025, **Impact Factor: 7.6**, ISSN: 2542-6605. DOI: https://doi.org/10.1016/j.iot.2025.101624
2. M. Jouhari, E. M. Amhoud, N. Saeed, and M.-S. Alouini, "A survey on scalable lorawan for massive iot: Recent advances, potentials, and challenges," *IEEE Communications Surveys & Tutorials*, vol. 25, no. 3, pp. 1841–1876, 2022, **Impact Factor: 33.84**. DOI: 10.1109/COMST.2023.3274934
3. H. Benaddi, M. Jouhari, K. Ibrahimi, J. B. Othman, A. Benslimane, and E. M. Amhoud, "Anomaly detection in industrial iot using distributional reinforcement learning and generative adversarial networks," *Sensors*, vol. 22, no. 21, p. 8085, 2022, **Impact Factor: 3.847**. DOI: 10.3390/s22218085
4. H. Benaddi, K. Ibrahimi, A. Benslimane, M. Jouhari, and J. Qadir, "Robust enhancement of intrusion detection systems using deep reinforcement learning and stochastic game approaches," *IEEE Transactions on Vehicular Technology*, vol. 71, no. 10, pp. 11 089–11 102, 2022, **Impact Factor: 5.978**. DOI: 10.1109/TVT.2022.3186834
5. M. Jouhari et al., "Distributed cnn inference on resource-constrained uavs for surveillance systems: Design and optimization," *IEEE Internet of Things Journal*, vol. 9, no. 2, pp. 1227–1242, 2021, **Impact Factor: 9.936**. DOI: 10.1109/JIOT.2021.3079164
6. M. Jouhari, K. Ibrahimi, H. Tembine, and J. Ben-Othman, "Underwater wireless sensor networks: A survey on enabling technologies, localization protocols, and internet of underwater things," *IEEE Access*, vol. 7, pp. 96 879–96 899, 2019, **Impact Factor: 4.098**. DOI: 10.1109/ACCESS.2019.2928876

International Conferences (indexed in Scopus)

1. M. Jouhari, H. Benaddi, and K. Ibrahimi, "Efficient intrusion detection: Combining x2 feature selection with cnn-bilstm on the unsw-nb15 dataset," in *2024 11th International Conference on Wireless Networks and Mobile Communications (WINCOM)*, 2024, pp. 1–6. DOI: 10.1109/WINCOM62286.2024.10658099
2. M. Jouhari and M. Guizani, "Lightweight cnn-bilstm based intrusion detection systems for resource-constrained iot devices," in *IEEE IWCMC*, Ayia Napa, Cyprus, 2024. DOI: 10.1109/IWCMC61514.2024.10592352
3. H. Benaddi, M. Jouhari, K. Ibrahimi, A. Benslimane, and E. M. Amhoud, "Improvement of anomaly detection system in the iot networks using cnn-lstm approach," in *IEEE GLOBECOM*, Kuala Lumpur, Malaysia, 2023. DOI: 10.1109/GLOBECOM54140.2023.10437475
4. E. M. Amhoud, M. Jouhari, T. Maksymyuk, K. Zerhouni, and K. Ibrahimi, "Conditional generative adversarial networks for rx-to-tx translation in wireless communication systems," in *IEEE GLOBECOM*, Kuala Lumpur, Malaysia, 2023. DOI: 10.1109/GLOBECOM54140.2023.10437739
5. Y. Etiabi, M. Jouhari, A. Burg, and E. M. Amhoud, "Spreading factor assisted lora localization with deep reinforcement learning," in *IEEE 97th VTC*, Florence, Italy, 2023. DOI: 10.1109/VTC2023-Spring57618.2023.10200189

6. M. Jouhari, K. Ibrahimi, J. B. Othman, and E. M. Amhoud, "Deep reinforcement learning-based energy efficiency optimization for flying lora gateways," in *IEEE ICC*, Rome, Italy, 2023. DOI: 10.1109/ICC45041.2023.10279198

7. H. Benaddi, M. Jouhari, E. M. Amhoud, K. Ibrahimi, and A. Benslimane, "Adversarial attacks against iot networks using conditional gan based learning," in *IEEE GLOBECOM*, Rio de Janeiro, Brazil, 2022. DOI: 10.1109/GLOBECOM48099.2022.10000726

8. B. Jebari, M. Jouhari, and K. Ibrahimi, "Analysis of blockchain selfish mining: A stochastic game approach," in *IEEE ICC*, Seoul, South Korea, 2022. DOI: 10.1109/ICC45855.2022.9839233

9. H. Benaddi, M. Jouhari, K. Ibrahimi, and A. Benslimane, "Securing iot transactions against double-spending attacks based on signaling game approach," in *IEEE GLOBECOM*, Madrid, Spain, 2021. DOI: 10.1109/GLOBECOM46510.2021.9685598

10. M. Jouhari, K. Ibrahimi, M. Benattou, and A. Kobbane, "New greedy forwarding strategy for uwsns geographic routing protocols," in *International Wireless Communications and Mobile Computing Conference (IWCMC)*, Paphos, Cyprus, 2016. DOI: 10.1109/IWCMC.2016.7577089

Editorial and Scientific Service

- Extensive involvement in scientific evaluation, including editorial board membership, peer review for leading journals, technical program committee (TPC) service, and chairing conference sessions.

Editorial Board Membership

- **Editorial Board Member**, *Humanities and Social Sciences Communications* (Springer Nature), since 2025
  Developed expertise in editorial decision making, peer review coordination, and quality assurance of manuscripts.

Peer Review for International Journals

- More than **55 reviews** for international journals, particularly in IoT, wireless networks, and cybersecurity.
- **Core IoT and networking journals**: IEEE Internet of Things Journal (11), IEEE Access (16), IEEE Wireless Communications (3), IEEE Wireless Communications Letters (3), IEEE Internet of Things Magazine (2).
- **Other journals**: IEEE Transactions on Communications, Consumer Electronics, Industrial Informatics, Information Forensics and Security, Mobile Computing, Neural Networks and Learning Systems, Network and Service Management, Services Computing, Intelligent Transportation Systems, Computers & Security (3), International Journal of Communication Systems (4), and others.

Technical Program Committees (TPC)

- TPC member for flagship IEEE conferences including **Globecom** (2024–2025), **ICC**, and **IWCMC** (2023–2025).
- Active in specialized conferences such as **WINCOM** (2023–2025) and **CommNet** (2021–2024), as well as other regional and international workshops on networking and IoT.

Track Chair

- **Online Workshop on AI-Driven Network Security and Anomaly Detection** Co-located with the 2025 International Conference on Engineering and Computing Technologies (EngiTek 2025), Irbid, Jordan — 29–31 December 2025.
- Workshop website: https://mohammed-jouhari.github.io/nsad2025/

Session Chair

- Responsibilities as session chair at major IEEE conferences:

Editorial and Scientific Service (continued)

- International Wireless Communications and Mobile Computing Conference (IWCMC) – Online Session 20 (May 30, 2024)
- The 11th International Conference on Wireless Networks and Mobile Communications (WINCOM) – Session TS8 (July 25, 2024)

Teaching Experience

- **Virtualization and Cloud Computing** (32h) – Master's in Networks and Mobile Services, Faculty of Sciences, Ibn Tofail University, Kenitra (2024/2025)
- **Digital Culture** (24h) – Bachelor's in Fundamental Studies, Faculty of Law and Political Science, Ibn Tofail University, Kenitra (2024/2025)
- **Unix Operating Systems** (32h) – 3rd year Computer Engineering and Networks, EMSI Tangier (2023/2024)
- **Application Security** (32h) – 4th year Computer Engineering and Networks, EMSI Tangier (2023/2024)
- **Virtualization** (24h) – 4th year Computer Engineering and Networks, EMSI Tangier (2023/2024)
- **Information Systems Design** (24h) – 3rd year Computer Engineering and Networks, EMSI Tangier (2023/2024)
- **Case Study: UML** (32h) – 4th year Computer Engineering and Networks, EMSI Tangier (2023/2024)
- **Information Systems Governance** (32h) – 5th year Computer Engineering and Networks, EMSI Tangier (2023/2024)
- **Cross-Platform Development** (32h) – 5th year Computer Engineering and Networks, EMSI Tangier (2023/2024)
- **Data Security** – Master's in Software Engineering for Cloud Computing, Ibn Tofail University, Kenitra (18h in 2021/2022; 32h in 2019/2020; 32h in 2017/2018)
- **VoIP** (28h) – Bachelor's in Networks and Telecommunications, Ibn Tofail University, Kenitra (2021/2022)
- **IPv6** (28h) – Bachelor's in Networks and Telecommunications, Ibn Tofail University, Kenitra (2017/2018)

Bibliometric Indicators

Indicator	Google Scholar	Scopus
Citations	1156	796 (753 documents)
h-index	14	10
i10-index	18	–
Online Profiles	Link	Link