Abdul Qadir Khan

Address: Paris, France
linkedin.com/in/abdul-qadir-khan/ | GitHub/Qadir296 | khanqadir296@gmail.com

Work Experience

Post Doctoral Researcher Sept 2025 - present
LRE, EPITA
- Working with Prof. **Pierre Parrend** on using knowledge graphs to design attack-specific detectors for industrial control systems
- Teaching activities at Master's and Bachelor's level

Ph.D. Researcher Oct 2021 - Dec 2024
Sorbonne Université / Institut Supérieur d'Electronique de Paris (Isep)
- **Title:** Knowledge Base Systems for Cybersecurity in the Internet of Things Environments
- **Supervisors:** Prof. Lina Mroueh, Dr. Nouredine Tamani, Dr. Saad EL Jaouhari
- **Expertise:** Knowledge base system, Knowledge representations, Contextual Models, Logical Reasoning, Complexity Analysis, IoT, Cybersecurity

Teaching Assistant Nov 2022 - Jun 2024
Institut Supérieur d'Electronique de Paris (Isep)
- CT.1105 - Robotics (64h)
- CS.1108 - Computer Science (56h)

Master 2 Internship Apr 2021 - Sept 2021
Inria, Sophia Antipolis, France
- I worked with the ETSI Standardization Committee SmartM2M on the development of a standard for Asynchronous Contact Tracing for COVID-19.
- I was involved in designing and implementing a prototype.
- **Supervisors:** Dr. Luigi Liqouri
- **Programming Languages:** Python, JavaScript

ERASMUS+ Mobility Internship May 2020 - Dec 2020
Inria, Sophia Antipolis, France
- I worked with the ETSI standardization committee to develop the Advanced Semantic Resource Discovery standard.
- I participated in the simulation of the protocol.
- **Supervisors:** Dr. Luigi Liqouri
- **Tools and Programming Language:** OMNET++ Network Simulator, C++

Education

Sorbonne Université Paris, France
Ph.D. in Computer Science *2021 - 2024*

- **Title:** Knowledge Base Systems for Cybersecurity in the Internet of Things Environments (Thesis available Here)
- **Keywords:** Knowledge Base Systems, IoT, Cybersecurity, Reasoning, Logic, Complexity Analysis

Université Côte d'Azur Nice, France
Masters in Computer Engineering *2020 - 2021*

- **Main Courses:** Security and Privacy, Performance Evaluation of Networks, Distributed Systems, Machine Learning, Internet of Things

Université Côte d'Azur Nice, France
ERASMUS+ Mobility Programme *2019 - 2020*

- **Main Courses:** Blockchain and Privacy, Data Mining for Networks, Cloud Computing

Hazara University Manshera, Pakistan
Bachelors in Telecommunications *2014 - 2018*

- **Main Courses:** Networking Protocols, Communication systems, Signal systems

Skills

Programming Languages	Python, C/C++, JavaScript
Tools	OMNET++, HFSS Antenna Designing Simulator, Wireshark
Other skills	Software Development, AI, Risk Assessments, Ontologies, Internet of Things, Cloud, Telecommunication networks
Language Skills	English (Proficient), French (Intermediate), Urdu (Proficient), Pashto (Native speaker)

Scientific Publications

Khan, Abdul Qadir, Nouredine Tamani, Saad El Jaouhari, et al. (2023). "A Contextual Derivation Algorithm for Cybersecurity in IoT Environments". In: *2023 IEEE 22nd International Conference on Trust, Security and Privacy in Computing and Communications (TrustCom)*, pp. 1430–1435. DOI: 10.1109/TrustCom60117.2023.00195.

Khan, Abdul Qadir, Saad El Jaouhari, et al. (2024). "Knowledge-based anomaly detection: Survey, challenges, and future directions". In: *Engineering Applications of Artificial Intelligence* 136, p. 108996. ISSN: 0952-1976. DOI: https://doi.org/10.1016/j.engappai.2024.108996.

Tamani, Nouredine et al. (2024). "Improving ML/DL Solutions for Anomaly Detection in IoT Environments". In: *Advanced Information Networking and Applications*. Ed. by Leonard Barolli. Cham: Springer Nature Switzerland, pp. 193–206. ISBN: 978-3-031-57942-4.

Khan, Abdul Qadir et al. (2026). "Parallelized derivation algorithm for anomaly detection in internet of things environments". In: *Expert Systems with Applications* 296, p. 128958. ISSN: 0957-4174. DOI: https://doi.org/10.1016/j.eswa.2025.128958. URL: https://www.sciencedirect.com/science/article/pii/S0957417425025758.

Projects

Security testing of the Bluetooth protocol

Université Côte d'Azur

- Analyzed Bluetooth low-energy devices for vulnerabilities and conducted sniffing attacks using Ubertooth.

Design of MIMO antenna for UWB Applications

Hazara University

- For my final year Bachelor's project, I designed a MIMO antenna for ultra-wideband using the HFSS tool.

Volunteering

Student Volunteer Dec 2024
8th IEEE Cyber Security in Networking Conference (CSNET) *Paris, France*

President Jul 2023 - Nov 2024
IEEE Isep Student Branch *Paris, France*

Secretary Mar 2022 - Jun 2023
IEEE Isep Student Branch *Paris, France*

Awards and Achievements

EDITE Doctoral Fund
Sorbonne University, Paris, France

ERASMUS+ Mobility Program
Université Côte d'Azur, Nice, France

Gold Medal
Hazara University, Manshera, Pakistan