

Amani Abou Rida / *Computer Science*

✉ Strasbourg, France • ☎ (+33) 07 49604758 •
@ abou-rida.amani@etu.unistra.fr • 🇱🇧 Lebanese nationality • ♀ 25 years - Engaged

Academic Background

- Oct 2020–Present **Doctoral Researcher**, *Explainable and Transferable Anomaly Detection for CyberSecurity in Artificial Immune Ecosystem* - Strasbourg University, CRBS team, Strasbourg, France.
- May 2019–Oct 2019 **Internship**, *Extracting Attribute Based Access Control Model For Business Process Event Logs* - Telecom Sudparis University, ACMES, SAMOVAR, Paris, France, **Grade: Very Good (Rank 1)**.
- 2017–2019 **Research Master (MR2)**, *Information System and Data Intelligence*, Doctoral School of Science and Technology - Lebanese University, Lebanon, **Grade: Very Good (Rank 1)**.
- 2014–2017 **Bachelor in Computer Science**, Lebanese University, Lebanon, **Grade: Good**.
- 2013–2014 **Scientific Baccalaureate - Series: General Science**, Al-Batoul High School, Lebanon, **Grade: Very Good**.

Computer Skills

- Programming languages
 - *procedural* : language C, VISUAL BASIC, C#, ARCMAP
 - *object oriented* : JAVA, , PYTHON, C++
 - *web* : HTML/XML, WEB DJANGO, ANGULAR, PHP, JAVASCRIPT, CSS
- Networking & Security
 - Anomaly Detection, Attribute Based Access Control, Cryptography, Network security and privacy, Cloud computing
- Operating systems
 - Windows, Linux (Ubuntu)
- Data bases
 - GRAPH DATABASE NOSQL USING NEO4J CYPHER WEB, SQL USING MYSQL DATABASE
- Office tools
 - Microsoft Office, L^AT_EX
- Software engineering
 - STAR UML, Data Mining, Power Designer, WEKA
- Data analysis
 - Graph neural network, Knowledge Graph, Graph Embedding, Graph Analysis, Machine learning, Artificial intelligence, Deep learning, Process Mining, Data science, Big data, Semantic Web, Internet of Things, Ambient Intelligence, OLAP analytics, Hadoop and its ecosystem

MR2 Thesis

Title	<i>Extracting Attribute Based Access Control Model From Business Process Event Logs</i>
Supervisor	Prof. Walid Gaaloul (France) & Dr. Yehia Taher (Lebanon)
Co-Supervisors	Dr. Nour Assy (Lebanon)
Jury	Prof. Mahommad Dbouk (Reviewer) & Prof. Ahmad Fauor (Reviewer) & Dr. Yehia Taher (Reviewer)
Description	In this internship, we propose to automatically extract ABAC models from event logs which record the actual execution of business processes. Event logs capture, among others, which tasks are performed by whom and at what point in time, and what data are taken as input and output. Therefore, they provide rich information on task and data access policies. The extracted ABAC models represent the current state of policies configured within an organization or information system. They can serve as starting point for further refinement and customization to derive target state ABAC models that represent the tailored permissions to execute business processes in information systems. Moreover we are using data mining techniques in order to analyze event logs to get the rules that should be used for ABAC decision. I also created plugins to have a GUI in prom and to import event log. This work was published in BDSCIntell conference at Versailles University, Paris, France.

Publications:

- Jan 2022 **Amani Abou Rida**, Rabih Amhaz, Pierre Parrend. *Anomaly Detection on Static and Dynamic Graphs using Graph Convolutional Neural Networks*. Accepted as a Book Chapter in Robotics and AI for Cybersecurity and Critical Infrastructure in Smart Cities.
- Nov 2021 **Amani Abou Rida**, Rabih Amhaz, Pierre Parrend. *Evaluation of Anomaly Detection for Cybersecurity Using Inductive Node Embedding with Convolutional Graph Neural Networks*. Accepted in the International Conference on Complex Network and their Applications 2021, Madrid, Spain
- Dec 2019 **Amani Abou Rida**, Nour Assy, Walid Gaaloul. *Extracting Attribute Based Access Control Model From Business Process Event Logs*. Accepted in the International Conference on Big Data and Cyber Security Intelligence 2019, Versailles, France

Work Experience

- Oct 2020–Feb 2022 **Teaching Assistant at University of Strasbourg**, *Data Protection and Complex System Security: Applying Machine Learning for Anomaly Detection in Cybersecurity TP*, Strasbourg, France.
- Aug 2020–Sept 2020 **Data Scientist Job**, *Tayibat Company, Part time Job, Recommendation system for food delivery using Tensorflow and Python*, Remotely.
- Jul 2020–Aug 2020 **Data Scientist Internship**, *Areeba Company, credit cards recommendations using Apache Spark*, Beirut, Lebanon, .

- Jan 2020 – **Back-End Java developer Internship**, *Beirut digital district Company, Bluering*,
 Apr 2020 *Model View Controller (MVC) Entity framework in Java using IntelliJ IDEA*, Beirut, Lebanon.
- Aug 2016 – **.NET developer Internship**, *Integradet Digital Systems*, Beirut, Lebanon.
 Oct 2016

Certifications

- March 2021 Certification name: Neo4j Graph Data Science Certified, Certification authority: Neo4j, Certificate number: 17142086, Certification URL:
<https://graphacademy.neo4j.com/certificates/849efbaf2b30fe499ae3364f5b76af2890aabde15faaf92e27f3076895b756a7.pdf>
- Dec 2021 Certification for attending NCL13 – In-Memory Code Injection Attacks and Detection from Axon Technologies Company
- Dec 2021 Certification for Daily Advent of Cyber 2021 challenges from TryHackMe team

Seminars

- Nov 2021 Séminaire Doctorants « Cybersecurity, Trust and Learning » du LES – Laboratoire de Systèmes de l'Epita, Paris, France

Training

- Oct 2021 REDOCS2021 Rencontre Entreprises DOCTORANTS en Sécurité Orange company worked on "Multi-User Encrypted Data Processing", Marseilles, France

Languages

Arabic	Mothertongue	
English	Very good	<i>Read, written, spoken</i>
French	Intermediate	<i>Read, written, spoken</i>

References

- Walid Gaaloul** *Professor, University of TelecomSudparis, Tel.: +33 (0) 160.76.40.40, email: walid.gaaloul@Telecom-sudparis.eu*
- Yehia Taher** *Associate professor, University of Versailles, Computer science department, Tel.: +33 (0) 1 39.25.40.53, email: Yehia.Taher@uvsq.fr*