

# Selim Soufargi

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## Curriculum Vitae

### Education and Training

- 2021 - 2024 **Ph.D. in Computer Science**, *University of Calabria*, Italy,  
**Topic:** *Privacy-Preserving Multidimensional Big Data Analytics: Models, Techniques, Algorithms.*  
**Context:** *Horizon 2020 EU project QUALITOP: Monitoring multidimensional aspects of quality of life after cancer immunotherapy.*
- 2018 - 2019 **Master's of Science in Communication systems**, *ENIT-University of Tunis-Manar*, Tunisia,  
**Master Thesis:** *Quantum Walks on IBMQ (SQUID Approach).*
  - Development of a Python script to simulate quantum walks on IBMQ
  - Python 3.7, Qiskit Framework, Windows 7..
- 2009 - 2012 **Bachelor's of Science in Artificial Intelligence**, *ENSI-University of Manouba*, Tunisia,  
**Thesis:** *Crawling the Deep Web.*
  - Development of a Python Solution to Enable the crawling & the extraction of deep data from Javascript web
  - Python 2.7, Django BeautifulSoup. Linux 11

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## Working Experiences

- Jun 2024 - **Ph.D. Researcher**, *Department of Computer Science, Sapienza University of Rome*, Rome, Italy.  
Current Within the [COCOA Project](#)  
◦ Technical Environment : Java, Python, C++, ROS, AI, NAOqi APIs, Aldebaran 2.5
- January 2020 - **R&D Software Engineer**, *ItesLab Sarl*, Tunis, Tunisia.  
- February 2021 Within a Smart Building Application project, i worked on implementing different microservices for the application using mainly SpringBoot and NodeJS. I also was the main contributor in the project for deploying the associated Docker containers and setting an API gateway portal for the application.  
◦ Technical Environment : Eclipse, Java (SpringBoot), Javascript (NodeJS), MongoDB, API Gateway (JS), ExtJS (JS), ReactJS
- June 2013 - **Freelancer Engineer**, Tunis, Tunisia.  
January 2015 ◦ Technical Environment : Eclipse, Java, Javascript, Python.
- June 2012 - **R&D Engineer Intern**, *Nuance Communications*, Gent, Belgium.  
January 2013 As an R&D intern, I was assigned the task of creating an automatic reporting tool for speech data. This includes extracting structured data from a database and processing it with a python script before sending the results to be formatted with a J2EE birt eclipse-based template.  
◦ Technical Environment : Eclipse, Javascript, Python, J2EE Birt.

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## Computer Skills

- Tools VSCode, VISUAL STUDIO 2017, ECLIPSE, INTELLIJ, PYCHARM, GIT, JAVADOC
- Databases MYSQL, MONGODB, MARIADB, REDIS, POSTGRESQL, APACHE HIVE
- Languages & Frameworks JAVA 17, PYTHON (SCIPLY, NUMPY, PANDAS), JAVASCRIPT, APACHE SPARK, APACHE HADOOP, SPARK SQL, SPARKML, APACHE DRILL, APACHE SOLR

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## Languages

- |         |              |   |
|---------|--------------|---|
| Arabic  | Mothertongue |   |
| French  | Advanced     | <i>Fluent in speaking, listening, writing and reading</i>             |
| English | Advanced     | <i>Fluent in speaking, listening, writing and reading</i>             |
| Italian | Intermediate | <i>Fluent in speaking, very good in listening and good in writing</i> |
| German  | Intermediate | <i>Small talks and General comprehension in writing</i>               |

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## Publications

- Mars 2020 **CnNOT gates for implementing random quantum walk**, *I Ben Slimen, V Lakshminarayanan, Bulletin of the American Physical Society.*, Denver, Colorado.
- June 2022 **Scaling Posterior Distributions over Differently-Curated Datasets: A Bayesian-Neural-Networks Methodology**, *A Cuzzocrea, S Soufargi, A Baldo, E Fadda*, International Symposium on Methodologies for Intelligent Systems, 198-208, Rende, Italy

- June 2022 **An Effective and Efficient Graph Representation Learning Approach for Big Graphs**, *E Serra, M Joaristi, A Cuzzocrea, S Soufargi, CK Leung*, SEBD2021, Rende.  
Italy
- June 2022 **The Emerging Challenges of Big Data Lakes, and a Real-Life Framework for Representing, Managing and Supporting Machine Learning on Big Arctic Data**, *A Cuzzocrea, CK Leung, S Soufargi, AM Olawoyin*, International Conference on Intelligent Networking and Collaborative Systems 2022.  
Japan
- September 2022 **OLAP over Big COVID-19 Data: A Real-Life Case Study**, *A. Cuzzocrea, C. K. Leung, S. Soufargi, C. Gallo, S. Shang and Y. Chen*, Intl Conf on Cyber Science and Technology Congress (DASC/PiCom/CBDCom/CyberSciTech)., Falerna, Italy. 2022
- July 2023 **QFLS - A Cloud-Based Framework for Supporting Big Healthcare Data Management and Analytics from Big Data Lakes: Definitions, Requirements, Models and Techniques**, *A. Cuzzocrea, S. Soufargi*, DATA 2023, Rome, Italy. 2023
- July 2023 **Supporting Big Healthcare Data Management and Analytics: The Cloud-Based QFLS Framework**, *A. Cuzzocrea, S. Soufargi*, DaWak 2023, Penang, Malaysia. 2023
- October 2023 **F-TBDA: A Frequency-Based Temporal Big Data Analytics Technique for Mining and Analyzing Quality-Of-Life Indicators of Cancer Patients**, *A. Cuzzocrea, Geertruida H. de Bock, Willemijn J. Maas, S. Soufargi*, IEEE BigData, 2023.  
Sorrento, Italy
- July 2024 **Drill-CODA: A Framework for Supporting Drill-Across Multidimensional Big Data Analytics over Big Co-Occurrence Aggregate Hierarchical Data**, *A. Cuzzocrea, S. Soufargi*, DATA, 2024.  
Dijon, France
- January 2025 **Privacy-Preserving Multidimensional Big Data Analytics Models, Methods and Techniques over Big Data: A Comprehensive Survey**, *A. Cuzzocrea, S. Soufargi*, Expert Systems with Applications. 2025
- March 2025 **A Social Robot Companion for Individuals Eating Alone: Multimodal Interaction and System Integration**, *S. Soufargi, R. Niewiadomski, H. Fong, M. Mancini*, IUI, 2025.  
Cagliari, Italy
- April 2025 **AB-DOM: An Algorithmic Framework for Supporting Privacy-Preserving Big Data Publishing in Big Data Lakes**, *A. Cuzzocrea, S. Soufargi*, IEEE Transactions on Big Data. 2025

May 2025 **Designing Interactions for Artificial Commensal Companions**, *H. Fong, S. Soufargi, M. Mancini, R. Niewiadomski*, DIS, 2025.  
Madeira, Portugal