

Meriem Smati

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EDUCATION

INSA Lyon and Polytechnique Montreal

Villeurbanne, France; Montreal, Canada

Ongoing Computer Science PhD degree / Industrial Engineering PhD degree

October 2023 - Currently

Higher School of Computer Science 08 May 1945 - Sidi Bel Abbes (ESI SBA)

Sidi Bel Abbes, Algeria

Systems engineering Master degree / Engineer Diploma in Systems engineering

July 2023

Mohamed El Bachir El Ibrahimi University

Bordj Bou Arreridj, Algeria

License degree in Information Systems and Software Engineering

September 2020

- **Awards/Honors:** Valedictorian, Class of 2020

Abdelhamid Akrouf High School

Bordj Bou Arreridj, Algeria

Baccalaureate in Scientific field - graduation with honors

July 2017

WORK EXPERIENCE

INSA Lyon and Polytechnique Montreal

Villeurbanne, France; Montreal, Canada

PhD Student in a dual-degree program in Computer Science and Industrial Engineering

October 2023 - Currently

- Thesis Title: "Definition and Development of System of Systems Digital Twins to improve System of Systems Resilience"

Lumière Lyon2 University

Lyon, France

Adjunct Lecturer in Computer Science

September 2023 - July 2024

- "Object Oriented Programming in Java" Course
- "Basics of Programming and algorithms in Python" Course
- "Software Development (Conception, Resource and Time Management)" Course
- "Management of Databases" Course
- "Web Automated Data Collection" Course

Lumière Lyon2 University

Lyon, France

Intern - Final Year Project

February-July 2023

- Master Thesis Title: "Cognitive Digital Twins for IoT Data Faults Prevention"
- Engineer Thesis Title: "The Use of Cognitive Digital Twins on an IoT System for Edge Anomaly Detection"

Condor Electronics DSI

Bordj Bou Arreridj, Algeria

Intern

September 2021

Algérie Télécom

Bordj Bou Arreridj, Algeria

Intern

March-April 2018

LEADERSHIP EXPERIENCE & ACTIVITIES

PLM25

Seville, Spain

Participation in the DT Contest

July 2025

- Report Title: "WasteTwin: A Digital Twin of a Smart Waste Collection"
- Video Link: <https://www.intranet.disp-lab.fr/s/Y2narD4xr44GZCY>

CIGI-QUALITA-MOSIM25

Troyes, France

Presentation in CIGI Conference

July 2025

- Presentation Title: "A Smart City System of Systems Digital Twin: A Resilience-Oriented Application"

GDR GPL25

Pau, France

Presentation in the national days of GDR GPL

June 2025

- Presentation Title: "Developing a Digital Twin for System of Systems Resilience"

MODELSWARD25

Presentation in MODELSWARD Conference

Porto, Portugal

April 2025

- Published article: “Digital Twin System of Systems: A Layered Architecture Proposal”

PLM24

Presentation in PLM Conference

Bangkok, Thailand

July 2024

- Published article: “Enhancing Data Integrity with CSDT: A Solution to Predict Data Disturbance in IoT Systems”
- **Honors:** IFIP Marco Garetti Best Paper Award

Participation in PLM Doctoral Workshop

July 2024

- Paper title: “The Use of Digital Twins to Bolster the Resilience of an IoT System of Systems Infrastructure”
- Accomplished peer-review responsibilities

Participation in the DT Contest

July 2024

- Report Title: “CSDT in collaboration with DT: A solution for Disturbance Prediction in IoT Systems”
- Video Link: <https://www.intranet.disp-lab.fr/s/arbqpMqesnBtACp>

SAGIP24

Presentation and participation in the organization of SAGIP Congress

Villeurbanne, France

May 2024

- Published article: “Enhancing Data Integrity: A Solution to Predict Data Disturbance in IoT Systems”

Generis-Publishing and Libro-Terra Book

Online

Publication of a book on Generis-Publishing and Libro-Terra

February 2024

- Published book: “Cognitive Digital Twins for Smart Manufacturing and IoT Systems”

COC'2022

Online

Presentation in Connected Objects and Systems Conference

May 2022

- Published article: “Computer Vision and Deep Learning-Based support system for Visually Impaired People in an outdoor environment”

Developer of an “ArtificialEye” project

- a Computer Vision and Deep Learning-Based support system for Visually Impaired People April-July 2022

Web Developer of “LECTIO” An e-book Website

January-March 2022

Project Manager of “HYGIEIA” project A health web application

April-July 2021

Member in a scientific Group Alphabit

2021

Web developer of “ARTIFEX” project An online art gallery

May-September 2020

Start-up MédiTricks a communication agency

2019-2020

Co-organizer in GDG BBA & WTM BBA Google Developers Group - Women Techmakers

2019-2021

Events Organizer in TEDx, WIKISTAGE, HULT PRIZE

2018-2019

SKILLS & INTERESTS

IT Skills

- Digital Twins
- Machine Learning Development.
- Backend Web Development
- Problem Solving
- Algorithms and Data Structures
- IoT Development.
- **Programming Languages:** Python, Java, C, Pascal, Javascript, ExpressJS (NodeJS), PHP, Laravel, GDScript
- MySQL, Oracle SQL, Docker, Godot Engine, Anylogic

Soft Skills

- Sense of communication, listening, organization and team spirit.
- Optimistic, punctual, determined, flexible and dynamic.
- Leadership and project management.
- Public Speaking.

Languages: English, French, Arabic.

Interests:

- Data mining and Data analytics.
- Oceanography and marine biology.
- Traveling, painting, art, sewing, reading and learning.

CONTACTS

Portfolio: <https://meriemsmt.github.io/>

Linkedin: <https://www.linkedin.com/in/meriem-smati/>

Github: <https://github.com/meriemsmt>