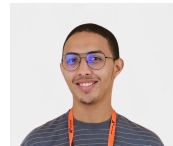


Badred-Edine Ouzougarh, Msc.

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in BadreddineOuzougarh

🌐 <http://example.example.org/>



As a recent graduate specializing in Geomatics, I bring a strong focus on GIS and urban data science. My enthusiasm for 3D data acquisition, processing, and visualization drives me to seek innovative solutions for urban challenges that matter. I am dedicated to researching and designing algorithms that create real-world impact. With a passion for collaboration, I value teamwork and am committed to continuous learning, ensuring that I contribute meaningfully to our field's advancements.

Employment History

2024-3 months **Aalto University(Finland), Department of Civil Engineering**: Research Assistant for the Digital Twin project.

Education

2018 – 2019 **Baccalaureate in Mathematical Science.**
2019 – 2024 **Engineer Diploma ≡ Master of Science (M.Sc.) in Geomatics and Surveying.**
Thesis title: *GreenTwinCity: An Open Source Framework for an Urban Digital Twin of the Green City of Benguerir.*

Research Publications

- 1 O. Badreddine, “Greenitwincity an urban digital twin for the the greencity of bengreuire,” *Master Thesis*, 2024.
- 2 H. e. R. Rached Ouzougarh, “3d indoor modeling with low-cost rgb-d camera and ipad pro: A comparative study,” *ISPRS*, 2024.

Skills

Languages **Strong** reading, writing, and speaking proficiency in **French** and **English**. **Arabic** is my native language. I have started taking **Spanish** courses.

Coding **JS**, **Python**, **C++**, **SQL**, ...

Databases **PostgreSQL**, **DuckDB**, **MangoDB**.

Web Dev **HTML**, **css**, **JavaScript**, **ReactJS** **NodeJS**, **Streamlit** and **NextJS**

Misc. **Academic research**, **LaTeX** typesetting and publishing.

Projects and Research Activities

Research Activities

2024 **Aalto University, ASCI Summer Research Internship**, Selected for the Digital Twin in Construction Management project.

Aalto University, Poster Presentation, Presented a poster of our lab work during my 3-month internship at the labs.

Projects and Research Activities (continued)

- 2023
 - **UM6P, School of Architecture, Planning, and Design**, Thesis Project: Working on the creation of an open-source framework for a City Digital Twin of the Green City of Benguerir.
 - **UM6P, School of Architecture, Planning, and Design**, Summer Research Intern: Conducting Researches on the creation and applications of the 3D city semantic models and the City Digital Twins on the territories performance and sustainability.
 - **College of Geomatic Sciences (IAV Hassane 2), Indoor 3D Modeling**, Enhancing and testing the capabilities of indoor modeling using low-cost sensors, such as the iPad Pro.

Projects

- 2024
 - **GreenTwinCity Geoportal**, developing the first version of a City digital twin part of my master thesis.
 - **SmartDustbin Collection**, Developing a smart system based on IoT sensors, location services, and AI to collect and manage waste in the city of Rabat.
- 2023
 - **SmartTwin Project**, Developing a digital twin of our department's buildings to monitor building components and simulate the emergency system.
- 2022
 - **DroneTop Project**, Developing a prototype of a quadcopter drone to detect city trees.

For more information about me, visit my portfolio via [this link](#).