



# Zakariya Taha

Data Science Master student at EPFL

## CONTACT

📍 Chemin des Triauldes 7

📞 +41 78 633 46 03

✉️ [taha.zakariya@epfl.ch](mailto:taha.zakariya@epfl.ch)

🌐 [linkedin.com/in/tahazakariya/](https://www.linkedin.com/in/tahazakariya/)

## Skills

- **Python, Java**, SQL, Git, Scala, Latex, C, VHDL, Assembly, Processing.
- Excel, Powerpoint, Outlook, Word, Eclipse, VSC, PyCharm, DataGrip, VMware.
- **Teamwork** with a good sense of leadership, conflict management and active listening.
- **Autodidact** with strong adaptability, reliability and organisation.
- A good sense of **problem-solving** and decision-making.

## Languages

**Arabic** : Native

**French** : Bilingual

**English** : Fluent

## Main courses

Algorithms, Stochastic models, Probabilities and statistics, Functional programming, Introduction to machine learning, Introduction to visual computing, Computer networks, Computer Architecture, Computer security, Quantum information processing, Introduction to database systems.

## PROFILE

22 years old master student at EPFL (École Polytechnique Fédérale de Lausanne) in the field of Data Science, passionate about algorithmic and machine learning.

Detail-oriented, possessing extensive analytical skills and a significant ability to work in team environments, I'm looking for an internship to put my acquired skills into application within an innovative and dynamic environment.

## EXPERIENCE

### Analysis and physics student teaching assistant - EPFL

09/2020 - 12/2020, 09/2021 - now

- Assisted 100+ students to understand theoretical concepts of analysis and physics given to first year Communication Systems engineers and Micro-engineers, providing them with the necessary resources to improve their skills.

### Research student assistant - Xplore (with VITA Lab at EPFL)

02/2021 - 07/2021

- Tackled a new aspect of the stereo odometry challenge with 360° cameras, using **convolutional neural networks** in order to determine the position of the rover.
- Analyzed multiple **papers** to evaluate the existing methods.
- Processed our dataset to match stereo camera images with LiDAR output using **Numpy** and **OpenCV**.
- Leveraged **CNN** and our dataset to create a depth map from stereo camera images (**Pytorch**).

## EDUCATION

*Master of **Data Science** - EPFL, Switzerland*

09/2021 - now

*BSc in **Communication Systems** - EPFL, Switzerland*

2018 - 2021

*CMS - EPFL, Switzerland*

2017 - 2018

*Baccalaureat - Belbachir, Morocco*

2014 - 2017

## Projects

- **KNN**: Implement and evaluate a program capable of recognizing handwritten numbers (**Java**)
- **Grid game**: Small game engine allowing you to create RPG-type two-dimensional grid games (**Java**)
- **Javass**: Variation of the famous Jass game, can be played remotely with others. (**Java**)
- **Database Project**: Processed a huge raw dataset by building ER and relational schemas, cleaning data (**Python Pandas**), loading it into **DataGrip**, realizing multiple complex queries (**SQL**) and optimizing them.
- **Multicycle Nios II Processor**: implement a simple multicycle processor architecture (**VHDL**)