

# Zakariya Taha

Data Science Master student at EPFL

#### CONTACT



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#### 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 problemsolving 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, 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 - 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)