

ARTHUR BENZAQUIN

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Final year master at the Ecole Polytechnique Fédérale de Lausanne (EPFL), I am looking for a company to complete a master thesis in the field of data science/Computer vision with a preference for sport or medical/biological subjects.

Education

2013-now | [M.Sc. in Microengineering](#)

Main topics Bachelor: micro-informatics, semiconductors devices, electromechanical conversion, signals and systems, sensors, embedded programming, fluid dynamics, statistics, electronics, manufacturing.

Main topics Master: Product design, computer vision, deep learning, applied machine learning, management, entrepreneurship.

Experience

2018 (5 months) | **Intern**

[Biomedical Image Processing Lab](#) (LIB, EPFL) | Lausanne (CH)

The project tackled in this intern was about understanding better the effect of environment parameters (Temperature, humidity, light cycles along others) in a fully controlled greenhouse by monitoring the plants using time-lapse video.

To achieve such goal, I focused on:

- Design and built a very low-cost image acquisition system (stereo camera using Rpi)
- Design, implement and test a software using traditional computer vision methods (ImageJ)

This interdisciplinary project requires to cope with data on hardware and software level. I improved my skills in embedded systems by working with Raspberry Pi used for image acquisition. It also made me improve my skills in Python and Java programming languages used for image acquisition, processing and visualization.

2017 (5 months) | **Internship**

Bosch Visiontec | Sophia Antipolis (FR)

Learned the basics of Computer Vision and CNN. My work was to benchmark an existing specialized computer vision engine and its associated framework for specific CNNs required

for ADAS. During the internship I used the CNN framework "Caffe" and applied my skills in low level programming.

2015-2019 | Teaching assistant

EPFL | Lausanne (CH)

I was assisting teachers of the electronic and physic department for the bachelor courses of the Microengineering students. It consists in supervising and grading exercises with a group of 10 students each week. It strengthens my knowledge in these fields and improved my capacity to explain concepts in a clear and precise way.

2015 (6 months) | Safety manager

[Bestmile](#) | Lausanne (CH)

Accountable for the safety of driverless shuttles during the European Project Mobility at EPFL. My work consisted to assure the safety of driverless shuttles in a dense pedestrian area. I understood some of the real-world limitations of camera driven autonomous cars.

Side Projects

Lausanne Malt Festival 2019 | Music

Responsible of the music show at the Lausanne Malt Festival 2019. Contact of artists, creation of the line-up, organization of the scene logistics the day of the event.

Lausanne Racing Team 2018 | Electronics

Head of electronics. I was in charge of creating the team and supervising the work of the electronic team to prepare the first formula student race of the EPFL car. I learned about team motivation drivers and management by recruiting the team, define deadlines and tasks to be done.

4L Trophy 2018 | Humanitarian Rallye in Morocco

The objective is to drive for 2 weeks across the Moroccan desert with Renault 4 cars to provide children with school supplies. We distribute more than 50kg of school furniture.

Skills:

Languages: French – Native | English – Professional | Spanish – B2

Coding: C, Python and the basics of Java, C++, Matlab.

Interests:

I am very interested in sport (snowboard, handball, football) and in travels.