








# ThomasKimble

## MSc in Robotics and Space Technologies



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Looking for an robotics software engineering internship for 2021.

## Education

### MSc in Robotics

#### École Polytechnique Fédérale de Lausanne

 Sep 2019 - Ongoing  Lausanne, Switzerland

- Major in Robotics with Mobile Robotics orientation
- Minor in Space Technologies

### Bsc in Microengineering


#### École Polytechnique Fédérale de Lausanne

 Sep 2015 - Jul 2019  Lausanne, Switzerland

- Machining course including in curriculum

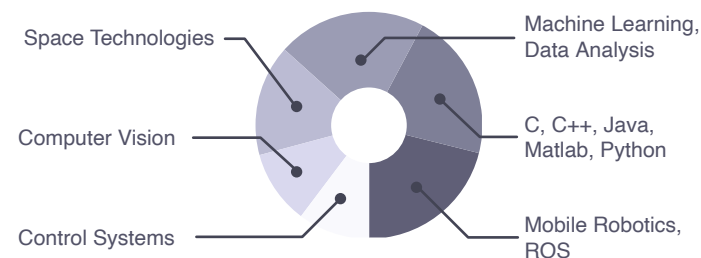
### French Baccalauréat Général

#### Collège du Léman

 Sep 2001 - Jun 2015  Versoix, Switzerland

- Scientific orientation
- Highest distinction

## Hard Skills



## Soft Skills

### Studies

Work Ethic Problem Solving Curiosity

Alternative Thinking Presentation Skills

Group Work Leadership Patience

### Music

• Performed guitar, drums and piano as part of multiple bands, orchestras as well as solo

Creativity Stage Presence Attention to Detail

## Languages



English and French  
German



## Projects



### Robotics

#### Wheeled Robotics

 Sep 2019 - Jul 2020  Lausanne, Switzerland



- Implementation of computer vision, path planning, global and local navigation, and filtering for use of multiple Thymio robots.
- Development of a line following algorithm using a PID controller with the e-Puck 2 robot – Nominated for the GCTronic Award.
- Design of a two wheel robot in ROS with implementation of way-point navigation and obstacle avoidance.

#### Aerial Robotics - Laboratory of Intelligent Systems

 Sep 2020 - Feb 2021  Lausanne, Switzerland

- Development of a model for predictive drone swarms with limited field of view.
- Finding optimal swarm and field of view parameters for collision free trajectory generation with up to 9 agents



#### Embedded Systems

 Sep 2019 - Feb 2020  Lausanne, Switzerland

- Development of a game on the Nintendo DS microprogrammed embedded system.
- Knowledge of the system architecture and game design.



### Data Science

#### Applied Data Analysis

 Sep 2020 - Feb 2021  Lausanne, Switzerland

- Scientific paper replication and extension.
- Use of regression analysis, supervised learning and applied machine learning to train and analyse datasets.
- Creation of friendship prediction models with Foursquare User's social networks and check-in location data.



#### Intelligent Agents

 Sep 2019 - Dec 2019  Lausanne, Switzerland

- Development of multiple agents for optimisation of a pick-up and delivery problem.
- Optimal path planning and development of a central coordination for multi-agent systems.

### Space Technologies

#### Constellation of High Energy Swiss Satellites

 Sep 2020 - Feb 2021  Lausanne, Switzerland

- EPFL Spacecraft Team's CHES Mission Electrical Power System pole leader.
- Understanding of a Space Mission and implementing an EPS within a CubeSat platform.