



## INTERNSHIP

### Drone Developer / Software Developer for Embedded Linux Systems

#### Problem Description

Air surveillance is one of our core competences. In order to extend the capabilities of our stationary sensor systems and increase their performance, we are designing highly mobile solutions based on a UAV platform. This UAV carries various type of sensors and can accomplish surveillance missions autonomously. The primary goals of this internship are the implementation of the drone control software on a Linux-based Single Board Computer, the integration of electro-optical sensors, and the conduction of field-testing with our drone prototype. Along this task, you may also identify and integrate various open source software libraries, according to the requirements of our platform.

#### Your Profile

- Bachelor/Master student in computer science (electrical/robotics engineer with very good programming skills is also possible)
- Ability to solve challenging technical problems independently and to coordinate efficiently within a cross-disciplinary team
- First experience with C++ programming on Linux, git and the Linux Command Line Interface
- First experience with at least one dynamically typed programming language (Python is a strong plus)
- Solid conceptual understanding of Object Oriented Programming, Inter-process communication, Unit Testing and basic data structures.
- Prior experience with development on embedded Linux Platforms, Drone Platforms and/or Single Board Computers (e.g. Raspberry Pi) is a strong plus
- Prior experience with build automation / continuous integration is a plus
- Knowledge or practical experience in one of the following topics is a plus: Machine Learning / Computational Geometry / Signal Processing / Computer Vision

#### Contact

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