



INTERNSHIP

UI / 3D Graphics Engine Developer

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 first goal of this internship is the design and implementation of additional UI features for our open-source-based drone ground control software, which includes aspects such as a graphical display of drone locations on a map, rendering live video stream overlays and designing intuitive controls to send new commands to the drone.

The second goal is the scripting of 3D scenes in Microsoft AirSim and/or Unreal Engine to create photo realistic graphics of drone flights in various landscapes to support our computer vision efforts.

Your Profile

- Bachelor/Master student in computer science, electrical engineering, robotics or similar
- Ability to solve challenging technical problems independently and to coordinate efficiently within a cross-disciplinary team
- First experience with C++, including a solid understanding of C++ memory management
- First experience with scripting 3D Game Engines such as Unreal Engine, Unity or similar
- First experience with either JavaScript and/or Python
- Prior Experience with Qt5 and/or QML is a strong plus
- Prior experience with implementing touch-based UIs is a strong plus

Contact

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