

# Autonomous Hunter Drone for Counter-UAV Applications

## Project Summary

The goal of this project is to design and implement an autonomous drone that is able to detect, pursue and take down other (unauthorized) drones. Such a system may in the future be used to protect airports, sport events or critical infrastructure. Aside from working in simulation, we also aim to build a physical prototype and test it.

## Project Type

- BA Thesis (3-6 months)
- MA Thesis (6 months)
- Praktikum / Projekt (3 months)

## Required Qualifications

- Basic programming skills (mostly Python)
- Motivation and grit

## Contact

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## Detailed Description

Developing such a complex system as an autonomous hunter drone requires many different skills, techniques and algorithms. There is hence a multitude of subtasks to be solved. This includes, but is certainly not limited to: Image Processing / Object Detection, Path Planning, Hardware Design, (Visual) Navigation, 2/3-D Tracking and Capturing. Feel free to get in touch with us to get to know more about the project and discuss the concrete things that interest you. We are of course also open to your ideas on how to improve the current prototype system.

