

# Trajectory planning for autonomous drones

## Background:

The amount of unmanned aerial vehicles (UAVs) has increased significantly the latest years with the evolved technology. UAVs are being used for a multitude of tasks, including fire detection, aircraft maintenance, and prehospital emergency care. To achieve reliable and safe operation of autonomous UAVs the need for real-time trajectory planning and obstacle avoidance is key. An effective three-dimensional trajectory planner could increase safety during the flights.

## Description and objective:

- Identify critical situations that could result in material damage and/or injuries.
- Identify different trajectory planners suitable for the task and compare their capabilities.
- Evaluate the performance either simulation based in a high speed application or real-life in a low speed application.

