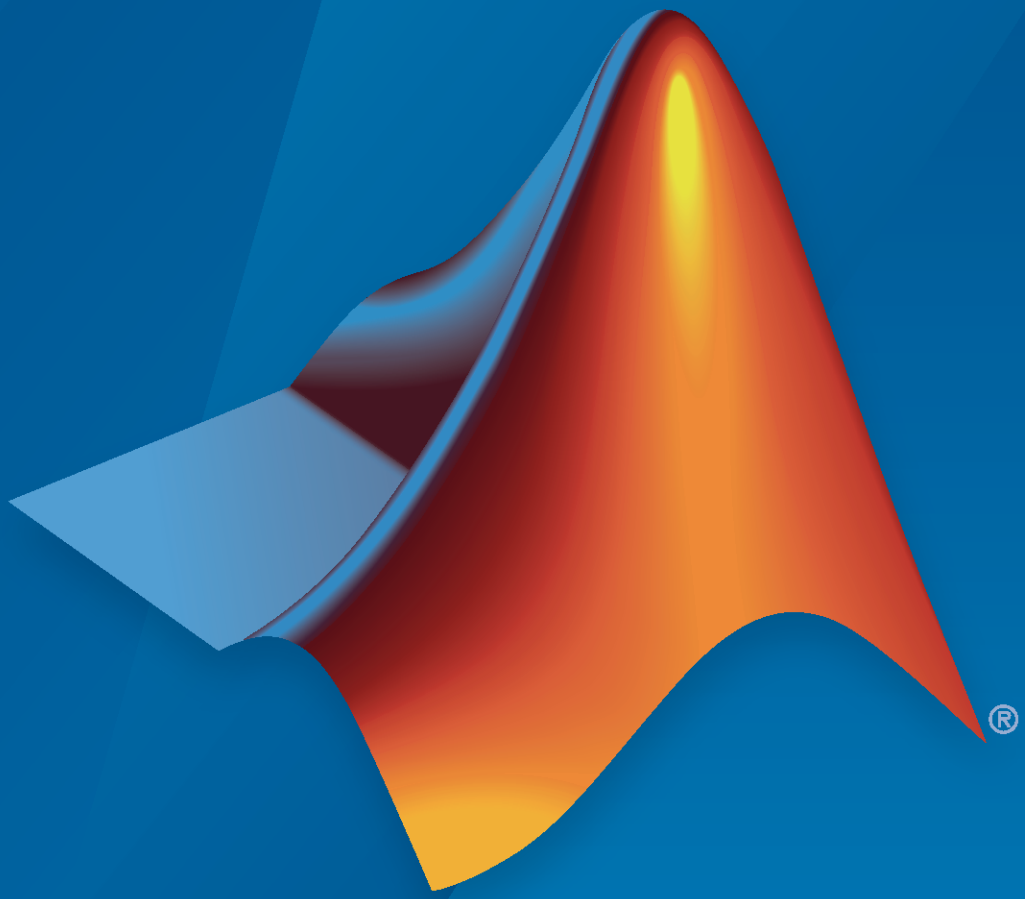
UAV Toolbox

Getting Started Guide



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Product Overview

UAV Toolbox Product Description

Design, simulate, and deploy UAV applications

UAV Toolbox provides tools and reference applications for designing, simulating, testing, and deploying unmanned aerial vehicle (UAV) and drone applications. You can design autonomous flight algorithms, UAV missions, and flight controllers. The Flight Log Analyzer app lets you interactively analyze 3D flight paths, telemetry information, and sensor readings from common flight log formats.

For desktop simulation and hardware-in-the-loop (HIL) testing of autonomous flight algorithms and flight controllers, you can generate and simulate UAV scenarios. You can simulate camera, lidar, IMU, and GPS sensor outputs in a photorealistic 3D environment or in a 2.5D simulation environment.

UAV Toolbox provides reference application examples for common UAV usages, such as autonomous drone package delivery with multirotor UAV. The toolbox supports C/C++ code generation for rapid prototyping, HIL testing, and standalone deployment to hardware such as the Pixhawk® Autopilot.