



Flight Control Engineer

Job Description

Martin UAV is actively building a team of world-class engineers to develop revolutionary unmanned aircraft systems technologies.

We are currently seeking an experienced Flight Control Engineer to join the team in development, test and production efforts for a VTOL UAV. The ideal candidate should be able to contribute broadly but will be primarily responsible for development and testing of the flight guidance, navigation, and control algorithms as well as the software-in-the-loop, and hardware-in-the-loop test environment.

Responsibilities

- Updating the UAV controller for vertical hover and standard winged flight modes using the Simulink model-based development toolset
- Use both classical and modern control design techniques to develop flight control and navigation algorithms through the entire flight envelope.
- Design and analyze feedback and feedforward controllers to meet stringent vehicle performance design requirements
- Design flight-tests to experimentally assess vehicle stability margins and controller performance
- Develop autopilot features and interfaces to interact with new GCS functionality
- Maintain the UAV 6-DOF simulation model including sensors, actuators, flight dynamics and environment using the Matlab/Simulink toolset
- Validate the simulation against real flight data
- Develop flight test plans, and provide flight test support
- Troubleshoot autopilot anomalies seen in flight test data
- Deploy and integrate the Simulink model onto the HIL processor and manage the HIL simulation environment
- Gather simulation and flight test data, automate data analysis, and generate analysis reports

Skills and Experience

- Expert knowledge with Matlab, Simulink, S-functions, MEX interface, Embedded code generation
- Expertise in C/C++, Python or other scripting languages
- Experience with sensors such as INS, GPS, and Air Data
- Proficiency in software configuration management tools such as Mercurial or Git, defect tracking, requirements management, and peer review tools
- Experience in UAS design and architecture
- Enthusiasm for working in a small team and development and ownership of technical roadmaps

Qualifications

- BS, or MSc. In Aeronautical Engineering, or Control Systems.
- 5 years relevant aerospace industry experience

Compensation

We are located in Prosper, Texas and offer a comprehensive benefits package including medical, dental, vision and life insurance, many PTO days, and a 401(k) plan with company matching.

Contact our Careers Team at Careers@MartinUAV.com to submit a resume and a statement regarding your suitability for this position.