TOP FLIGHT
TECHNOLOGIES®
MASTERY LEADS INNOVATION.

Drone Software Engineer
(Boston)

Top Flight Technologies (www.topflighttech.com) – the first commercial UAV manufacturer to utilize a hybrid propulsion engine for extended flight and enhanced payloads is seeking Software Engineer(s) to be part of its engineering team. We are looking for individuals that have core programming and problem-solving expertise, and that can work individually and on team project assignments. The work environment is centered on agile development, where designs are quickly tested, problems resolved, ideas improved, products built and tested. Candidates should have a passion for building innovative product solutions.

Yes, this is a well-funded startup; the work is demanding but is also really fun grasping new skills while working with other bright and energetic engineers and team members.

Candidate responsibilities include:

- Develop firmware and control software in C/C++
- Work with control and hardware engineers to develop robust flight control systems for small to large scale drone systems
- Develop self-diagnostic code strategies to enable in-flight safe recovery from fault states
- Develop and manage firmware and software revision control and deployment strategies
- Work with engineering team to design and optimize the next generation of control architecture and power management systems
- Develop and manage firmware and software revision control, continuous integration and deployment strategies
- Design and develop cloud-based flight management system software
- Design and develop onboard autonomy software
- Perform sensor integration with flight controls

Required Experience and Education:

- MS or higher in EE, CS, or commensurate engineering field with emphasis on Robotics
- 2+ years of experience building and deploying successful commercial-quality software applications and systems
- Proficiency in C/ C++ and Python; Java, MATLAB/Simulink a plus
- Experience with physics-based simulation frameworks and graphics engines, such as Unreal or Unity
- Experience developing/integrating algorithms and sensors with the Robot Operating System (ROS)
- Experience with unmanned systems (Fixed wing & VTOL platforms), flight controllers, physics-modeling, power systems, sensors, navigation, communications, and micro-controllers all a plus
- Working knowledge in web-development and cloud-based computing a plus
- Familiarity with Gazebo, and AirSim simulations tools a plus.
- Proficiency with PX4 autopilot software highly desirable
- Familiarity with typical programming development tools such as CMake, Qt, Github/lab, gdb, and Boost
- Effective communication skills (both verbal and written)

What's in it for you?

- Work side by side with a world-class technology and business leadership team that is defining new markets in the growing domain space of unmanned systems and where the solutions are recognized as industry leaders
- Tremendous growth opportunity; competitive compensation package including base salary, plus bonus, stock options and benefits.

You must be authorized to work in the United States on a full-time basis for any employer.

Please forward cover letter and resume to jobs@topflighttech.com for consideration.

No relocation fees.

No agencies please.

Top Flight Technologies
Drone Software Engineer Job Application Survey

Name: _____

Email Address:_____

1. Please rate your abilities in the following areas:

	Excellent	Good	Fair	Poor	n/a
Software Development for Drones					
C/C++ coding ability					
Python coding ability					
Teamwork					
Algorithms experience, e.g. control, SLAM, Sensor Fusion, Image processing etc.					
Experience with drone autopilot flight stacks					
Experience with modeling and simulation					
Experience with ROS					
Writing and oral					

2. Tell us about one of your most challenging but favorite projects and why?