



Open Position: Senior or Staff Aerospace/Control Systems Engineer

ABOUT PARABILIS

At Parabilis, we design, develop, test, and fly affordable in-space propulsion and small satellite solutions. Parabilis is one of the few companies in the world that has both propulsion and satellite capabilities under one roof.

We are leveraging the space heritage of our team to build an exciting and growing company that will meet the current and future needs of our customers and provide a challenging and fun place for our employees to pursue their dreams. Our current programs include an upper stage for a commercial small launch vehicle, a classified space mission for the DoD, and propulsion for atmospheric hypersonic test flights.

Parabilis Space Technologies, Inc. is located in San Marcos, CA and operates a propulsion test facility in Lakeside, CA.

JOB SUMMARY

If you are selected for this position, your responsibilities will involve developing space-related systems including control systems for space vehicles and small satellites. Other responsibilities will include designing building, testing, and troubleshooting propulsion systems and components. Parabilis encourages ownership from early-stage concept development to commercialization; subsequently, you will have substantial opportunities to work upstream and downstream from your primary area of responsibility throughout the design, development, build, test, and flight of a space vehicle.

- Designing and developing propulsion and spacecraft systems; generating detailed drawings
- Using appropriate engineering tools (e.g., Matlab) to perform common analyses
- Design control systems for propulsion modules and small satellite systems; create a control system test plan; design a realistic hardware/software test bed; develop and write clear test procedures; analyze and test control-related algorithms, models and software
- Develop and write system assembly, integration, and checkout procedures; perform system integration and tests that account for valves, actuators, and other related components; troubleshoot anomalies as necessary
- Explore, define and document trajectory and control-related requirements; perform trajectory analyses for orbital or atmospheric maneuvering
- Supporting cold flow and hot fire propulsion tests
- Provide mission-related analyses and reports as needed
- Contribute to business development work (B&P) as needed



MINIMUM REQUIREMENTS

- Bachelor's degree in related engineering discipline
- Knowledge of propulsion and spacecraft systems
- Approximately 5-10 years of experience in satellite systems; experience with attitude determination and control systems for spacecraft or GNC for launch vehicles
- High-level ability to use MATLAB or Simulink
- Knowledge of one or more programming languages (e.g., C or C++)
- Knowledge of attitude determination and control systems (ADCS) hardware and performance specifications including reaction wheels, torque rods, sensors, redundancy and fault management
- Ability to develop software for flight simulations
- Ability to perform "flat sat" builds and conduct common tests
- Ability to write clearly, precisely, and concisely; ability to organize, construct, and write important documents such as proposals or program reports
- U.S. Government regulations require that you must be a U.S. citizen or US person (lawful permanent resident of the U.S.)

DESIRABLE (one or more of these is definitely "nice to have")

- Experience with real-time, object-oriented, embedded software programming
- Ability to travel, though frequent travel is not required
- Electrical engineering degree or advanced engineering degree (MS or PhD) in an aerospace related discipline

HOW TO APPLY:

Send updated resume and a cover letter to: jobs@parabilis-space.com

OTHER

As a small company, Parabilis relies on the capabilities and good judgement of its employees. We prefer to unleash the talent of our employees rather than trying to control it with hierarchy or excessive bureaucracy. Subsequently, the person selected for this position will be trusted and empowered to act in the best interest of Parabilis and its customers. Every person at Parabilis contributes outside of their primary area of technical expertise (that's how learning occurs) and helps to propose/win new business for our growing company. If you like variety, this job will be fulfilling and fun.

Parabilis is an Equal Opportunity Employer; employment with Parabilis is governed on the basis of merit, competence and qualifications and will not be influenced in any manner by race, color, religion, gender, national origin/ethnicity, veteran status, disability status, age, sexual orientation, gender identity, marital status, mental or physical disability.