



Propulsion Engineer, SmallSat Propulsion Systems

We are looking for a Propulsion Engineer to support the development, testing, qualification and manufacturing of Bradford Space's new generation of propulsion systems for smallsat applications. This includes Comet, a launch-safe and cost-effective water-based propulsion system with flight heritage since 2018.

In this endeavour, you will be an instrumental member of a small team building the new generation of Bradford's propulsion systems, blending the responsible high-quality engineering practices of traditional aerospace engineering while implementing the rapid iterative development methods and dynamic workplace culture of a NewSpace style scale-up.

Essential Characteristics

- Master degree in aerospace engineering, mechanical, physical or related engineering discipline or have an extensive experience working with propulsion sub-systems (for satellites).
- Previous exposure to satellite propulsion systems, design, development and testing
- Familiarity with test software (Python, Labview, VBA etc)
- An attention to detail and consistency of work
- A positive, energetic and self-driving attitude
- Proficient English language skills

Valued Characteristics

Please feel free to apply even if you don't meet all of these!

- Knowledge of fluid mechanics, thermodynamics, heat transfer, mechanics and materials
- Practical experience with hydraulic components (valves, pipes, tubes, filters, seals, etc.)
- Practical experience with vacuum chambers
- Experience using FEA tools for conducting structural and thermal analysis
- Understanding of spacecraft subsystems and their system impacts
- Knowledge of each phase of spacecraft components development
- Programming experience (C++, Python, Matlab, Excel, etc.)
- Familiarity with technical reviews (PDR, CDR, etc.)
- Familiarity with relevant industry standards (e.g. ECSS & IPC)
- Familiarity with test campaigns (TVAC, vibration, radiation, extreme temperatures etc.)

Key responsibilities

- Implement design improvements to our Comet propulsion system
- Perform engineering calculations, analysis, modelling and simulations to calculate system performance and operation
- Develop and evaluate new propulsion architectures and requirements
- Assist in the design and selection of new components
- Create, manage, maintain and prepare for review, system diagrams and technical documentation
- Develop and execute test plans, procedures, analyse test data, and verify requirements
- Provide support during test campaigns
- Conduct hardware troubleshooting together with test engineers
- Assembly, integration and testing of propulsion prototypes

What we can offer in return

We offer you the chance to personally participate in building hardware that will fly in space. You would take on an important role in a young, revenue-generating company, with a mandate to focus on technical design and implementation with an aggressive development schedule featuring rapid hardware iterations. You would also have opportunities to learn from and work with our other senior engineers. The position is in Luxembourg, a beautiful, international and welcoming country at the heart of Europe.

Duty station

Belval, Luxembourg.

Contract Type

Luxembourg CDI, full-time, on-site.

The role is open to candidates of any age, gender, orientation, that have or can get work authorization within the EU.

Is this you? If so, [apply here!](#)