**POSITION : Space Mechanics Engineer**

## DETAILS

**Position type** : full-time/CDI

**Starting :** September 2018

**Salary :** depending on experience

**Location :** Toulouse, France

## ABOUT EXOTRAIL

Exotrail is a French start-up based in Ecole polytechnique in France. We are part of the *New Space* global movement that is disrupting the space industry. In the past 10 years, the cost of access to space has been divided by 1000. Private companies are investing billions of dollars to develop constellations of small satellites to deliver Internet everywhere, IoT communication or very high revisit rate Earth observation services.

Our vision at Exotrail is to help building an agile space. We are developing propulsion and operation technologies for these small satellites. Our small propulsion system is the smallest Hall Effect Thruster in the world. Thanks to our electric propulsion system and our unique operation software, small satellites can change their orbit after launch. With this new agility, they increase their performance while lowering their costs.

We believe that this is only the beginning and that small satellites equipped with propulsion will be able to deliver new space services to entirely disrupt the space industry by being able to service, repair, assemble and manufacture spacecrafts directly in orbit. Join us and be part of our great ambition !

## JOB DESCRIPTION

- You will work on technology development to design new trajectories for innovative spacecraft missions. Your main objectives will be to design the algorithms used to automate maneuver planning with a low-thrust propulsion system. You will have to:

- Design maneuvers with a low-thrust propulsion system;
- Develop the algorithms to enable automation of the computation of these maneuvers;
- Code an operational computational software – you will work with a software developer on this project who will be responsible for the front/back-end;
- Be proactive and propose solutions to the problems you may identify.

- Additionally, your work may be link to GNC developments to robustify precise maneuvers.

- You will report directly to the Chief Technology Officer.

## PROFILE

- You must have an engineering background with a strong experience in aerospace engineers and orbital mechanics. An automation and guidance-navigation-control (GNC) experience is a plus.

- You should have very good soft and presentation skills (presentations, technical documentation, assumptions, oral presentation). You need to be able to work with a great autonomy. You must have a full proficiency in English or French (both is a plus). You must have very good analysis skills and work efficiently.

- You should be passionate with space and entrepreneurship and be ready to work in a very demanding, evolving and challenging environment – and be ready to propose suggestions and be pro-active!

CONTACT

Send an email at careers@exotrail.com with a CV and a cover letter