

Controls, Simulation and Test Engineer in grid-scale Energy Storage Innovation: Gravitricity Ltd, Edinburgh

Gravitricity are a growing start-up developing a novel mechanical energy storage system. This is crucial technology to decarbonising our energy systems. During 2020 we will design and build a 250 kW demonstrator system as well as progressing the design of our full-scale technology. As the complexity of our projects builds, we need dynamic engineers to drive forward the development of this innovative technology.

Job Brief

Gravitricity requires an experienced and versatile controls and analysis engineer to work across different areas of the business. Initial work will focus in these areas:

Demonstrator Controls: Get rapidly, and deeply involved in understanding the control structures behind the demonstrator system control. Interface with partners involved in this area and identify opportunities for controls innovations.

Demonstrator Test and Analysis: Take a lead role in analysing demonstrator test data and feeding conclusions into further testing, simulations, and control system innovations. This will require hands on development of scripts or programs to automate data analysis and allow rapid, on-site analysis of test results.

Demonstrator and Full-scale Simulations: Fully engage with and ideally develop the Simulink simulations of Gravitricity systems. Be able to understand from first principles the control problems that need to be solved and lead or contribute to simulations strategies that allow solutions to be developed.

This will be a challenging and rewarding role that will require you to span a range of interesting analysis, modelling, testing, and systems engineering areas. This could suit someone with experience in industry in a similar role or coming from academia with industrial connections, but we are open to any background with the right skills. The right person will be very self-driven to work proactively across several areas of the technology, be able to learn fast and be comfortable working outside of their core expertise. An innovative, entrepreneurial attitude is also crucial.

Essential Requirements

- Excellent understanding of engineering first principles, ideally with some appreciation spanning both mechanical and electrical systems
- Advanced matlab experience
- Hands on test implementation and test data analysis experience
- Proven record of finding creative methods to explore complex analytical problems
- BEng of higher in Mechanical Engineering, Electrical Engineering, or other suitable science background

Beneficial Skills

- High level of Simulink proficiency with experience of application to rotating machine controls problems
- Systems engineering experience within industry
- Understanding of power systems, how they operate, how they are changing and the role that storage plays



Benefits

- Chance to make a significant impact within a small and dynamic company developing a technology vital for the global energy transition.
- Competitive salary dependent on experience
- Modern, flexible company: all staff given option to work 4-day week (pro rata)
- 5% employer pension contribution
- EMI options scheme

Application

We are a small company, actively building a diverse and passionate team, and encourage anybody with enthusiasm and know-how to apply, irrespective of your background.

In order to apply please send a CV and a cover letter, explaining why you would be motivated to work with us to miles.franklin@gravitricity.com