

Test and Simulation 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 test and simulation engineer to work across different areas of the business. Initial work will focus in these areas:

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 simulations: Engage with the existing Simulink simulations of Gravitricity systems. Be able to understand the structure of the simulations and adapt and modify parameters to align simulation and physical testing outputs.

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

- Advanced Matlab user, including bulk file handling, data import, manipulation, visualisation and export
- *Extensive* hands-on experience of running data analysis to interrogate data from test systems (NB: it is not expected that a single undergraduate course or project will provide sufficient exposure here).
- User of appropriate tools to manage and control code development (e.g. GitHub or similar)
- Track record of generating innovative strategies to analyse data and developing bespoke test protocols to fill gaps in data and to answer questions arising from emergent findings
- BEng or higher in Mechanical Engineering, Electrical Engineering, or other suitable science background

Beneficial Skills

- PhD or other post graduate education could be a very suitable preparation for this role
- Simulink proficiency would be a valuable asset
- Ability to find creative methods to explore complex analytical problems
- An understanding and even somehow industrial control systems are developed and implemented
- Understanding of electrical 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 recruitment@gravitricity.com