Role Profile Summary

Title:	Junior Data Scientist
Reporting to:	Head of Data
Location:	Our HQ is based in The Core, part of Newcastle's Helix site in the city centre. It's a great place to work, filled with like-minded businesses who are all working on innovative solutions to future city challenges. We operate a hybrid approach to working but we hope that you'll be able to spend at least two days a week working with the team at HQ.
Salary range	Competitive (Based on experience)

About us
Connected Energy develops battery energy storage systems using second life electric vehicle batteries. As the world strives towards meeting net zero targets, our technology will become an integral part of organisation's energy strategies. Our systems help to solve multiple business problems: they allow a site to manage their energy peak loads, they can store energy generated from renewable sources (PV and wind) and they can also generate revenue by feeding energy back into the grid. The company has recently received investment from Caterpillar Venture Capital Inc, the Hinduja Group, Mercuria, Our Crowd and Volvo Energy, enabling Connected Energy to scale-up its operations and move into large-scale project development.

Role Description

A pioneer of the circular economy, Connected Energy is a world leader in providing and enabling the use of 2nd life electric vehicle batteries in commercial scale energy storage systems. These energy storage systems capture a wealth of data from a large range of battery packs. This data is validated to optimise the outputs of battery systems and predict future trends.

As a Junior Data Scientist, you will be part of an agile cutting-edge team looking at developing tools and techniques for the optimisation of energy storage systems. By understanding our data and by embedding data skills into our organisation you will further increase our ability to deliver the most efficient battery energy storage systems, whilst supporting the circular economy.

Our battery systems are continuously generating a wealth of data and presents a wide range of opportunities to generate additional value using machine learning and artificial intelligence. We are looking for an ambitious junior data scientist who can grow rapidly within our business. Connected Energy has strong links with the universities of Newcastle (including the National Innovation Centre for Data), Warwick, Lancaster and East Anglia and is keen to further develop and capitalise on these relationships.

Responsibilities

- Design and deployment of machine learning tools for predicting and optimising the performance of battery packs
- Identify and interpret anomalies for preventative maintenance
- Forecasting pack life and carbon impact from both historical and predicted usages
- Work with the wider Connected Energy team to commercialise the outputs of our data science activities through system, product, and service development
- Liaise and collaborate with global partners to facilitate data capture methodologies and approaches to system optimisation

CONNECTED ENERGY
Advanced Energy Storage Solutions

Skills and Requirements
Essential: • BSc or higher in data science or related discipline (statistics, machine learning, computing science, mathematics etc.) • Experience working with large volumes of time series data • Data collection, problem definition and experimental design • Understanding of machine learning models and processes • Ability to communicate findings to a full range of stakeholders both internally and externally • Proficient with R and/or Python • A passion to be part of a growing cleantech SME and the diversity of opportunity and development that it offers • Code management using Git (e.g. version control) **Desirable:** • Experience with state space modelling, filtering and/or stochastic volatility modelling. • Experience with neural networks • Experience working with AWS or other cloud storage systems • Strong interest in decarbonisation and climate change • Understanding of battery technology and electricity mathematics/physics • Experience with data management of cloud-based storage and databases

Please send your CV and Covering letter to the email address info@c-e-int.com stating: **'Junior Data Scientist application'** in the title.

Unfortunately, due to the volume of applications we receive, we are not always able to contact everyone, however if you are invited for an interview, you will be contacted directly by the manager for the position.