

JOB DESCRIPTION

Job Title: Software and AWS Cloud Engineer

Reporting to: Head of Engineering

Purpose: The Software and AWS Cloud Engineer is part of the PARIS Development Team. As part of

the engineering team you'll develop solutions to interact with a variety of on-site renewable assets, building and maintaining APIs, building products responsible for streaming data from the on-site devices to our cloud infrastructure and serving reliable, structured data to our data stores. You'll also work on products responsible for taking optimiser instructions and relaying that information to onsite devices to augment the behaviour of renewable assets. This role is responsible for the Joulen's AWS cloud infrastructure. The role will play a key part in supporting our development, deployment, and operations teams to ensure the scalability, security, and reliability of our cloud-based

applications and services.

Key Responsibilities:

- Building low latency APIs to interact with energy markets such as the balancing mechanism and dynamic containment market.
- Design and build data models that represent the relationships between the numerous complex data sources.
- Collaborate with the Data Science team and KDB engineers to ensure solutions that capture, transform and store reliable on site data that will service the rest of Joulen applications.
- Work with the PARIS development team to test and troubleshoot the PARIS applications.
- Work closely with stakeholders and project managers to develop applications to meet customer requirements.
- Ensure the security and compliance of AWS environments by implementing security best practices, encryption, access controls, and auditing mechanisms.
- Collaborate with development and operations teams to automate the provisioning, configuration, and deployment of cloud resources using Infrastructure-as-Code (IaC) like terraform.
- Configure and optimise AWS compute services such as EC2 instances, ECS/EKS clusters, Lambda functions and auto-scaling groups to meet performance and scalability requirements.
- Monitor the health and performance of AWS resources using native and third-party monitoring tools and implement automated alerting and remediation processes.
- Stay current with emerging technologies and industry trends, integrating relevant advancements into the company's technological roadmap including AWS.
- Support bug fixing and issue resolution in response to business requirements.
- Any other duties as determined reasonable by the Head of Engineering.



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| Criteria | Essential | Desirable |
|--------------------------------------|---|--|
| Qualification/ Attainments | Degree level education in a computer science. Java/Python developer first. AWS Solutions Architect Professional (equivalent). Highly numerate. 4+ years' experience. | |
| Relevant Knowledge and Experience | Strong experience with Java or Python & SQL. Strong experience with AWS (ECS and Lambda). AWS IoT Deploying solutions and managing them through terraform and other CI/CD tooling. Strong experience with the manipulation of complex datasets. | Familiarity with modbus protocols. Experience with renewable energy management. |
| Skills & competencies | Good verbal and written communication skills. Proven creative mindset that can bring innovation and efficiency to established and new products. Self-motivated, results focused and able to work on own initiative. Proactive with the ability to effectively use own initiative. Strong analytical, planning and organisational abilities Effective time management skills. | |
| Circumstances | Available to work additional hours as necessary | |



Software AWS Cloud Engineer - Person Profile

The successful candidate will be an experienced Java and or Python developer who is also a certified AWS Solutions Architect Professional.

They will be a Java/Python developer first that has enhanced their skills with AWS Cloud qualifications and experience. If the primary development discipline is Python, the successful candidate will more than likely will be an engineer and not from a data science background.

Joulen seeks to employ staff who are not afraid to question and challenge the status quo. Joulen want employees to think *outside the box* and seek to being innovation to development and delivery.

The successful candidate will be a team player who is not only content to work on a common goal, but will support the other members of the team in achieving it.

Joulen utilise Agile/SCRUM project management and the successful candidate will be required within this delivery discipline.

The role will be split between development of Joulen's PARIS energy management platform and maintenance/enhancement of Joulen's AWS cloud infrastructure. It is estimated that the role will have an 80/20 split with respect to development and AWS Cloud activities respectively.

This role is hybrid and will be expected to be in the Belfast office a minimum of 3 days a week, with Tuesdays being the Company *anchor day*.

Benefits

- Competitive salary
- Pension
- Private medical insurance
- Life Assurance

To apply

please send CV and covering letter to support@joulen.com.

Closing date is Friday 21st March 2025