

Senior Software Engineer

Location: Edinburgh (hybrid). You must have the right to work in the UK.

About us

Earthwave is a cutting-edge data science company that uses satellite data to predict, understand and prevent the effects of climate change. We are part of multiple international consortia which deliver scientific research and processing algorithms using a range of Earth Observation data and ground-based sensors for monitoring global ice trends; quantify environmental changes; and make satellite data easily accessible and understandable. As such, we operate the data and information portal cs2eo.org and produce the [CryoTEMPO-EOLIS products](#) on behalf of the European Space Agency, as well as contribute to activities in the preparation and design of new satellite missions.

About you

We are looking for a Senior Software Engineer with several years' experience working in the sensor data or geospatial data processing domain to join our Engineering team. In this role, you'll engage in work across the full software lifecycle, technical leadership, and the maintenance of Earthwave's hardware and software systems.

A keen interest in Earth Observation and Climate Change is desirable. The position is ideal for someone looking to work across the full range of software and IT roles associated with the provision of Earth Observation sensor data and information as a service. The successful candidate will collaborate within a small Engineering team (also covering IT) which collaborates with a larger Data Science team to deliver Earthwave's projects.

You must have a right to work in the UK, and be able to commute to our office in Edinburgh at least one day a week. Candidates based in Scotland's Central Belt will be favoured over those commuting from elsewhere.

Responsibilities

The candidate will report to and work closely with the Head of Engineering.

The core responsibilities of the role are:

- Technical Leadership and Project Management of the software portion of our projects. This will include supervision of and completion of estimates, bids and grant applications, requirements capture, systems engineering, design, implementation, testing, maintenance and disposal for software and hardware systems.
- The productionisation and deployment of algorithms defined by our Data Scientists into systems and environments defined by ourselves and our customers.
- Maintenance and refactoring of the codebases that create our products and services.
- Provision of training, support and advice on the topic of software engineering and IT systems to our staff across the full range of systems we use.

- Procurement, maintenance and disposal of our shared on-premises hardware and cloud infrastructure.

Essential skills

- The candidate must be able to demonstrate experience of user requirement capture, design, implementation, testing, integration, deployment, maintenance and disposal of a software system.
- The candidate must possess strong skills in the following technologies:
 - Python, ideally Pandas, Numpy and Flask.
 - A well-known JavaScript Framework, ideally React.
 - NoSQL Databases, ideally MongoDB.
 - CI/CD, ideally GitHub Actions.
 - Docker.
- Background in remote sensing, healthcare technology, autonomous systems, manufacturing, game development or other area handling real or simulated sensor measurements.
- The candidate must be capable of on-premises Linux server procurement, commissioning, maintenance and disposal.
- The candidate must possess strong technical writing and communication skills, e.g. to write user-facing software documentation.

Desirable skills

The following skills are not essential, but we will consider them favourably when selecting between applicants:

- CesiumJS.
- The Google Cloud Platform services BigQuery, Cloud Storage, Compute Engine and Cloud Run.
- Vercel and Kubernetes.
- Message Brokers (e.g. RabbitMQ, Apache Kafka, Google Pub/Sub)
- Providing Technical Leadership for projects or work packages with at least a value of £100k PA.

Do you have any other skills you'd like us to know about? We are a small company and are therefore always welcoming of new expertise.

What does it mean to work with us?

- We are a small but growing team with a range of different backgrounds really enjoying the challenge of running a small business in the space sector. This is an exciting time to join us, since you'll help to shape the company of the future!
- We care about the environment and all our projects and services are focused on understanding, predicting and preventing the effects of climate change on our planet. We take pride in the quality and efficiency of our work as we think a topic as serious as climate change deserves care and attention. If you think the same, you'll enjoy the opportunity to work with us!
- We enjoy a hybrid working style, giving us the flexibility to work from home some days, but also to look forward to meeting up in person at our Edinburgh office. We recognise the benefits of both hybrid and flexible working while emphasising the importance of

collaboration, and you will have the opportunity to balance both working from home, as well as spending set days in person at our office.

- We believe a healthy work-life balance leads to a healthier business.
- We are committed to Fair Working principles; we strive for a positive work environment that values our employees, and we respect individuals' differences.
- You'll enjoy benefits including dental insurance, fitness scheme contribution, a cycle to work scheme and the ability to purchase additional annual leave days beyond your standard entitlement.
- We have fun working, since we truly care about the work that we are doing.

Please apply for this job at <https://www.experis.co.uk/job/senior-software-engineer-1>.

Note that your application must contain a link to an online portfolio that includes at least one open source, currently operational web service. This service should ideally be a solo project by the Applicant. Non-solo and closed-source projects (e.g. services worked on in previous roles) may be considered in lieu, but only with specific, detailed evidence of the Applicant's contribution. More examples across a wider range of domains are better.