

Position description

SENIOR SOFTWARE ENGINEER

About Xerra

We believe in a sustainable future through the power of science, which means we are focused on conducting research and developing products that help us look after our planet, not harm it.

We use Earth observation data and remote sensing technologies to develop new and applied science-based products for New Zealand industry, local and national governments, as well as the international market.

We're a collaborative and multidisciplinary team made up of research scientists, software engineers, designers and business and communication experts. We hire passionate, purpose-driven people who want to conduct research and build outstanding and effective products in a safe and fun, but hardworking environment.

We believe that to build a great company and tackle complex problems, we need a broad range of skills, perspectives and backgrounds. We invest in our team, support one another and intentionally make time for open conversations. We want to identify our blind spots, and that requires a steady integration of new perspectives.

Position purpose

Our systems ingest and analyse very large (geospatial) data sets which are then served to client applications.

We're developing software to help monitor and protect the maritime domain by turning multiple sources of large and complex data into intuitive and insightful tools for analysts. Our software helps nations address issues such as illegal fishing, biosecurity risks, and potential COVID-19 cases introduced via vessels.

We're also working to monitor the health of lakes via satellite data. We're investigating the development of software to support this new area of research.

This engineering role will play an important part in developing these products, and in our future work.

Position scope

This is a full-time, backend systems engineering position. You will have the opportunity to work remotely with flexible work hours, provided you are able to deliver on your primary accountabilities, and attend meetings within regular working hours, as needed.

We do our best work when we direct the skills of many on our team towards single complex challenges. As such you'll likely work with nearly everyone on the team at some stage.

Key characteristics

You will need to be able to learn quickly and be curious about systems software, databases and making software work at scale.

As a team, we share responsibility for the whole product lifecycle: design, implementation, testing/review, deployment and operations. When needed, we work on tasks outside of our specialist areas, and you need to be willing to contribute as required.

You'll be working within our small and dedicated product team – moving fast and working independently. To thrive in this role, you need to excel in a remote working environment while demonstrating a high level of integrity.

Primary accountabilities

This position is a senior role, and as such has important duties and responsibilities to fulfil. As a Senior Software Engineer, you will be expected to:

- Develop robust, usable, elegant responsive code;
- Collaborate on multiple projects with other members of the product team;
- Perform code reviews and quality assurance testing;
- Participate in an operations duty rotation, responding to user support requests and critical systems issues; and
- Stay abreast of technology developments and actively teach and learn from colleagues.

Position requirements

Primarily, we want someone who produces great work and gets the job done. However, as this is a senior role, you will need to have significant experience in the essential areas.

Essential Knowledge, Competencies and Skills

- Extensive knowledge of server-side coding and databases - we use Python, Go & Postgres;
- Extensive knowledge of GraphQL and/or REST APIs;
- Extensive experience in software testing – unit & integration testing; and

- Demonstrated ability to communicate complex ideas both verbally and by other means (presentations, proposals, bug reports, forum discussions, etc).

Desired Knowledge, Competencies and Skills

- Familiarity working with GIS (geographic information system) data and applications;
- Experience setting up scalable architecture with Kubernetes-like systems.
- Experience building shipped products that meet the needs of end-users;
- Knowledge and experience in frontend frameworks and their toolchains - we use JavaScript, React, Redux & Leaflet;
- Degree in computer science or related field