



Chief Engineer, Sentinel

Location: Seattle, WA

About Conservation X Labs:

[Conservation X Labs](#) (CXL) seeks to solve the world's greatest conservation problems by supporting innovative solutions that address the underlying drivers of extinction. We create solutions to prevent the extinction crisis through developing new technology in our labs, leading innovation competitions, and empowering talented innovators across disciplines to create transformative products that serve people and our planet.

Summary: We are seeking a highly motivated and experienced strategic thinker, technical enthusiast, and engineer, with a passion for conservation, to join our team in Seattle as the Chief Engineer of [Sentinel](#). In this role, you will be responsible for overseeing the architecture of the Sentinel, an AI-enabled hardware device, with technical disciplines spanning hardware manufacturing and development, (Python, C++, MLOps, embedded systems, and cloud infrastructure). In addition to architectural design, you will be expected to be hands-on with development and manage external technical/manufacturing partners to ensure successful product development and deployment.

To apply, please submit your resume and cover letter with the subject 'Chief Engineer, Sentinel' to daremightythings@conservationxlabs.org.

Position Description

The Chief Engineer, Sentinel, is responsible for overseeing the architecture of the Sentinel, an AI-enabled hardware device, with technical disciplines spanning hardware manufacturing and development, (Python, C++, MLOps, embedded systems, and cloud infrastructure). In addition to architectural design, you will directly engage in development and manage external technical/manufacturing partners to ensure successful product development and deployment. This individual reports to the head of Sentinel.

Responsibilities

- Serve as part of Sentinel's core leadership team, including in strategic decision-making, representation, collaboration and partnership engagement, and business planning
- Oversee technical architectural design and strategic planning across technical disciplines (hardware manufacturing and development, Python, C++, MLOps, embedded systems, and cloud infrastructure)
- Develop and maintain cloud software and pipelines for MLOps and database
- Develop software (C++, Python) for low-power battery-powered devices
- Integrate hardware prototypes with cloud infrastructure and platforms



- Design and develop hardware prototypes for field-based deployment
- Oversee product design, testing, evaluation, and rapid prototyping
- Assist the team in fieldwork and testing activities to enhance product development and integrate customer feedback.
- Manage external technical/manufacturing partners to ensure successful product development and deployment

Requirements

- Bachelor's or Master's degree in Electrical Engineering, Computer Science, or a related field (or a previous track record of success or a portfolio in lieu of a degree)
- 7+ years of experience in hardware product development and manufacturing
- Strong understanding of cloud infrastructure
- Experience with prototyping and debugging hardware and software
- Experience with machine learning, MLOps, and computer vision
- Ability to work independently and as part of a team
- Excellent problem-solving skills and attention to detail
- Passionate about conservation and biodiversity

Preferred

- Experience with acoustic machine learning applications
- Experience with Printed Circuit Board design
- Experience in applying technology to solve global challenges, particularly in last-mile settings, with a background or experience in international conservation science.

Salary and Benefits

We are offering a salary of \$132 - \$160k per year, depending on experience and qualifications.

We offer competitive benefits, as well as opportunities for growth and development within the company. If you are passionate about hardware product development and excited to take on this challenge, we encourage you to apply!

CXL is committed to creating and cultivating a diverse workforce and inclusive environment where every employee and contractor has the right to work in surroundings that are free from all forms of unlawful or intentional discrimination. It is our policy to hire, promote, transfer, terminate, and make all employment related decisions without regard to race, creed, ethnicity, religion, national origin, sex, gender, or sexual orientation.