



Software Developer

Solar Technology, Inc. (SolarTech) is an ISO-9001:2015 certified manufacturer of high-tech specialized construction equipment used for the management and control of traffic in and around work zones associated with road, highway, bridge construction, maintenance, and repair. Defined by reliability, SolarTech is the oldest manufacturer of portable trailer-mounted solar-powered Arrow Panels and Changeable Message Signs, and we build, and support all products at our single facility in Allentown, PA. Our equipment is recognized worldwide for durability, reliability, and strong engineering.

We are looking for a Software Developer who wants to join a small, long-standing engineering team that values autonomy, deep technical work, and long-term maintainability. As a small company, SolarTech's predominant trait is flexibility. We adapt quickly to the market and customer needs, and we adapt to employees' needs as well. On the programming side, we use tools and methodologies as they give us benefit, without being slavishly devoted to fads where they don't make sense. On the personal side, we operate in an environment of trust, where we make sure to get our work done but it is important to us that we are human beings first and we recognize that sometimes families require flexibility. It's also a good environment for people who want to make a creative difference, as we're very willing to listen to good ideas and give credit to where they come from, and to give creative control to people who demonstrate that they can handle it and make good decisions.

Job Summary

You will develop and maintain a diverse collection of interconnected products, from embedded Linux systems deployed in the field to the server software that monitors and controls thousands of devices worldwide, to the browser-based application operators use daily. While you will collaborate with a knowledgeable and supportive team, you will also have substantial independent responsibility and the freedom to solve problems using the tools and approaches that make sense.



Remote Position

Full-time, Monday through Friday.

Candidates must reside in the United States, excluding: New Jersey, California, Oregon, Vermont, Massachusetts, Connecticut, Washington, and Rhode Island.

A high-speed internet connection is required. A development workstation is provided.

This position reports to the Lead Software Engineer.

Key Responsibilities

- Writing Java and occasional C/C++ for our Linux-based variable message signs.
- Building embedded Linux programs that interface with radar, queue detectors, and other real-world sensors.
- Developing server-side Java services that monitor and control thousands of solar-powered devices in real time.
- Using Typescript/Svelte to build the modern browser interface used to manage our equipment.
- Creating programs that run in our server cluster to read data directly from sensors, cameras, and other internet-connected devices.
- Occasionally writing firmware for resource-constrained 8-bit and 32-bit microcontrollers.
- Working across the full lifecycle: architecture, implementation, debugging, testing, documentation, and maintenance.
- Engaging with non-programmers (engineering, support, field techs) to solve practical problems and improve reliability.

This is a job where you will genuinely work across embedded systems, distributed servers, and a modern web app — not three separate departments.

Qualifications

We value capability, clarity of thought, and engineering judgment over keyword-matching. The ideal candidate has:

- Significant experience with Java and C++.
- Experience with Typescript or JavaScript for browser-based applications.
- Experience with Python or Perl for scripting and tools.

As Reliable As the Sun





- Ability to design systems for reliability and maintainability.
- Ability to quickly learn new languages and libraries as needed.
- Comfort working in Linux environments.
- Ability to communicate clearly with engineers and non-technical colleagues alike.
- Self-direction, curiosity, and interest in understanding how the whole system works.

Tools & Environment:

We use tools chosen for practicality and engineering value. Our stack and workflow include:

- **Linux-based development environment** (the majority of our products run Linux).
- **Git** for version control, **Jira** for issue tracking, **Slack** for lightweight communication and daily check-ins.
- We are experimenting with **LLM-assisted development** and encourage developers to integrate tools that make their workflow better.

Benefits:

- Competitive salary based on experience.
- Medical, dental, vision, life insurance, company paid short term disability, long term disability, Paid Time Off (PTO), vacation, paid holidays and a 401(k) with employer match.
- A development workstation provided for remote work.
- A stable engineering environment where tools change only when there is a good reason.
- A culture that values contribution, deep thinking, and independence.