



## **POSITION DESCRIPTION LABVIEW SOFTWARE ENGINEER (1/2022)**

Sustainable Power Systems, Inc., based in Boulder, Colorado, at the foot of the Rocky Mountains, is a small and growing renewable energy systems integration company. We are especially active in designing components and control systems for wind and solar microgrids, the technology of choice for electrifying off-grid communities and remote industrial sites both in the US and abroad. We have supplied our technology to projects in Alaska, Hawaii, the continental US, and China. We are also pursuing numerous project opportunities in the Caribbean, the Pacific Islands, Latin America, and Africa

Sustainable Power Systems has a current opening for a very bright and highly motivated Software Engineer who can function well in a small entrepreneurial environment. The successful candidate will have a BS or MS degree in Electrical Engineering, Controls Engineering, or Computer Science and considerable LabVIEW programming experience. Ideally, he or she will have an interest in renewable energy and sustainability and is seeking employment that offers the opportunity to make a positive difference in the world. He or she will play a major role in the ongoing development of products for the renewable energy industry and help position the company for acquisition. This position will also help identify and instill software development best practices in our organization. This position requires a mature and versatile person that enjoys challenges and is both a team player and capable of independent work.

### **Position Description**

The person we are seeking will be a major contributor to the software design of our flagship microgrid control system and various other large power system components for use in microgrid projects. The projects involve primarily LabVIEW programming, both PC-based supervisory control and real-time machine level control.

Principal duties are the following:

- Improve and refine the large body of LabVIEW code that makes up our flagship microgrid control product.
- Control system testing
- Programmable automation controller programming in LabVIEW
- Operator interface programming
- Field troubleshooting of control systems
- Provide ongoing technical support to customers
- Training other engineers/programmers in best practices, code deployment, etc.

Willingness to pitch in and cheerfully accept new task assignments, even if outside one's "job description", is essential. The successful candidate must also understand what it means to work in an entrepreneurial environment, where the job sometimes takes precedence over everything else.

At least in the near term, the employee will work remotely from home, but since the position involves in-person meetings and intermittent work at our test site in northeast Denver, the employee must reside in the Boulder-Denver metro area.

### **Required Qualifications**

- BS or MS in electrical, controls, and/or software engineering.
- LabVIEW CLD or CLA certification
- Demonstrated excellence in developing and maintaining large LabVIEW applications
- Strong Python programming skills
- Proficiency working with and maintaining SQL databases
- Familiarity with Ethernet networking, IP addressing, and industrial communication protocols (Modbus, CANbus, etc.)
- Excellent written and oral communication skills (presentations, written reports, correspondence, etc.)
- Strong math and analytical abilities
- Strong interest in renewable energy and distributed generation
- Ability to work independently and without close supervision
- Resourceful, able to acquire new knowledge and skills through self-study
- Ability and willingness to travel sometimes for extended periods (e.g. 3 weeks), including international travel
- Ability and willingness to make a 2-year commitment (minimum)
- Must be able to independently acquire new skills and learn how to effectively use unfamiliar control programming languages and other software tools
- Pleasant disposition and good people skills.
- Legal right to work in the U.S.
- Covid vaccinated and boosted

### **Desired Qualifications**

- Basic AutoCAD or other CAD proficiency (electrical schematics, panel layouts, etc.)
- PLC industrial control programming experience
- Dynamic modeling of power systems using Matlab/Simulink or similar
- Good hands-on electrical and mechanical skills (wiring, control panel fabrication and assembly, etc.)

## **Compensation and Benefits**

As a young and growing company, Sustainable Power Systems strives to offer competitive salaries commensurate with experience and a good benefits package that covers the essentials. More importantly, we offer a ground-floor opportunity to participate in the growth of the company. In addition, of course, we offer interesting and varied work, a fantastic place to live, and an opportunity to make a difference by doing something that is good for the planet!

- 3 weeks paid vacation to start
- Sick time
- Paid holidays
- Employee stock options
- Worker's Comp Insurance
- Company paid Employee Savings Plan (SEP-IRA)
- Pre-tax Health Savings Account
- Company-paid HSA Health Plan

## **How to Apply**

Please submit your application, including cover letter and resume, through Indeed:

<https://www.indeed.com/cmp/Sustainable-Power-Systems,-Inc.>