



## **Job Description –Python/Embedded Software Specialist (70929)**

August 2019

### **About G2V Optics**

G2V is a fast-growing Edmonton-based technology & digital horticulture company. We have unique, world-leading technology with strong revenue growth in the past 12 months. Our mission is to develop and commercialize fully autonomous systems that will enable food production for a growing population while significantly reducing fresh water and land use through automated, integrated, intelligent growing technology.

We are an agile team that functions on a startup-style culture based on quick learning, honesty, personal development, and flexibility.

### **Summary**

The Python/Embedded Software Specialist reports directly to the Chief Technology Officer and is responsible for the development, testing, and deployment of the software stack integrated with a variety of embedded hardware that form the core platforms for G2V's evolving line of innovative lighting and solar simulation products. Python is the main tool currently in use for this purpose but there are dependencies on other software constructs including C, bash and javascript, as well as an integration component with open-source tools including Gnuplot.

The ideal candidate will have several years direct experience using Python and other coding platforms to directly manipulate embedded hardware.

Our new team member will have an opportunity to be a ground-level employee of a growing company. Compensation will be based on relevant experience and committed team members will also have the opportunity to participate in a stock option program.

This position will start as a one-year contract, with strong possibility for renewal. The successful candidate will be required to work full-time hours on site at our Edmonton office.

### **Primary Responsibilities**

- Architect, design, test, and deploy Python-based solutions in an embedded hardware environment
- Develop front-end and back-end Python wrappers for I2C hardware as part of new product development
- Develop software to run automated test equipment
- Perform javascript integrations as required
- Facilitate application communication with embedded digital peripherals

### **Target Skills & Qualifications**

The successful candidate will have:

- Deep python knowledge, with experience integrating directly with embedded hardware
- Scripting with bash and interfacing with other tools, such as Gnuplot
- Communication with embedded hardware using i2c
- The ability to work independently, prioritize, and create organized systems
- Exceptional written and verbal communication skills, with careful attention to detail
- Experience with numerical analysis and curve fitting considered an asset
- Solid familiarity with Unix considered an asset
- GUI development experience considered an asset
- Working knowledge of higher mathematics including calculus considered an asset



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- Previous experience in scientific instruments, R&D, electronics, lighting, or horticulture industries with a working knowledge of physics, chemistry, electronics or optics is considered an asset

Interest and awareness around sustainability and food production is a crucial part of our culture.

*To Apply:*

Please send a covering letter and current resume as a single document to [jobs@g2voptics.com](mailto:jobs@g2voptics.com), with a subject line referencing the job title "Python/Embedded Software Specialist".

G2V Optics Inc. thanks all candidates for their interest and regrets that due to application volumes only those individuals selected for interview will be contacted.