

WellIntel Engineering Director - DRAFT

About WellIntel:

WellIntel is a groundwater technology and information system company based in Milwaukee, Wisconsin. At WellIntel, we are making a critical resource - groundwater - visible, measurable, and sustainable for states, local communities, farmers, and businesses. Our cost-effective technology turns private wells into real-time monitoring points and gives water managers and well owners the insight they need to manage and plan.

WellIntel is shaking up an industry that's been doing the same thing with lackluster results for decades. We have big plans. We're growing quickly, but remain focused on ensuring the best experience for our customers. We value and expect thoughtfulness and high performance from our team. We are breaking new ground in this industry so it's critical that our team members be comfortable trying something new, asking for help, and taking the lead on new initiatives.

About the position:

The ideal candidate for this position can:

- Work independently and in teams in a lively, highly-productive and fast-adapting culture.
- Be an excellent listener and creative problem solver.
- Manage a diverse team of experts and specialized contractors.
- Listen, decipher and write platform and product specifications using use-cases from the customer/stakeholder perspective and then shape those use-cases into differentiated, commercially-viable products: simple, reliable, inexpensive hardware and stable code that operates unattended in embedded, cloud-based and big-data environments.
- Communicate both visually and in the written word, describing future-state benefits and efficient transitions, near term goals and long term vision.
- Move seamlessly within mechanical, electronic, natural, analog, frequency and digital domains while working with limited resources, and, importantly, designing for resource-constrained (power, space, distance, bandwidth, computing) applications.

Reports to the Co-Founders. Leads production and technical teams and contractors.

Things you will do:

Hardware Development/Commercial Support:

Manage and improve three hardware IoT platforms (Sensors/Telemetry Radios/ Ethernet Gateways) based on ST Micro 32-bit ARM controllers and the Semtech Chipset.

Must have understanding of embedded circuit design, prototyping and packaging, design for manufacturing, just-in-time and lean production systems.

Able to creatively adapt hardware to varied, challenging environments and applications while also setting priority for resource allocation based on technical challenges and commercial merit. Must have a grasp of plumbing, electric, geologic, hydrogeologic and rural water demands and systems, or be able to quickly come up to speed.

Firmware Development:

Be able to specify, architect and then source code to create and improve computing functions in embedded systems including workflow, timing, logic, inputs and desired outputs, user interface and experience, power and memory storage and consumption and communication.

Languages/Platforms:

- C/C++
- RTOS/LWIP
- I2C
- Modbus
- Proprietary messaging protocol
- IAR Virtual Studio

Cloud Architecture and Development

Application development, database architecture and development, big data/cloud computing and system support. Design and direct software architects and engineers, and subcontractors in a coordinated SCRUM to code, refactor, harden and scale systems in concurrent prototype and production via subversions through evolving specifications.

Build new and improve existing software on the WellIntel cloud, an IoT solution using a proprietary message protocol, relational PostgreSQL database, and APIs written in Java and hosted in a Google Compute Engine environment and visual and dynamic customer dashboards/experiences in web browser, PC software and mobile platforms.

Languages/Platforms:

- Java / J2EE
- C# .NET
- Rich Internal Applications (Web 2.0)
- PostgreSQL
- Spring Framework

- Google Cloud
- Google Apps
- LAMP (Linux/Apache/MySQL/PHP)
- Altassian/Jira
- SVN
- Jenkins
- Pentaho
- R
- R-Studio Pro
- R-Studio Connect

Base of Operations: Milwaukee, Wisconsin