H2Ok Innovations Software Engineering Lead Position

H2Ok Innovations is an IoT-enabled analytics platform providing data-driven optimization of industrial liquid and fluid systems for manufacturing. Liquid and water systems are at the heart of industrial manufacturing, but current methods of managing these fluid systems are incredibly inefficient and archaic, relying on manual grab sampling or monolithic sensors. This results in a lack of data and visibility, causing excessive resource and operating costs, as well as inefficient operations. We are rethinking this approach, with our comprehensive OS system consisting of a network of our capital un-intensive sensors, coupled with our ML-based optimization software. We believe in unlocking previously untapped data for our customers— who comprise society's most fundamental sectors— to enable them to gain a competitive advantage on the way they operate and bringing Industry 4.0. We are servicing major customers including Fortune 500 enterprises and backed by 2048 Ventures, 1517 Fund, Flybridge Capital, Techstars, and more. H2Ok Innovations is based out of Greentown Labs— one of the top cleantech technical communities in the world.

Job description:

This is a lead position. A technical understanding of all areas of the following areas with a specialized focus is highly preferred. This position will be leading engineers working on the following aspects. This position will be working on aspects including:

Software development:

- Full-stack software development with a focus on the back end
- Database management along with query and storage optimization
- Integrate data analysis and machine learning models for data processing
- Guide web development, converting customer challenges into forward-facing solutions
- Develop APIs for customers to integrate our data solutions into their workflow

Security:

- Ensure security of customer data during access, storage, and transmission.
- Securely deploy and integrate our IoT technologies within customer firewalls and networks
- Develop standards and security practices to meet regulatory and certification requirements of customers

IoT/Communications:

- Develop secure and reliable processes for retrieving data from sensors, processing it, and relaying it to cloud databases and industrial controllers through wireless and wired means
- Architect robust methods to integrate sensors into industrial controllers and software
- Design mechanism for updating and maintaining software as well as firmware of deployed devices on the field at scale

Machine learning + data science:

- Assist in building models to convert sensor data into information on product quality, process efficiency, material composition, etc.
- Exposure developing algorithms for time series analysis and predictive alerts for industrial process optimization
- Collaboratively work with the team and customers to ensure algorithms generate accurate and reliable results

Overall:

- Lead and help build a team of driven software engineers
- Building and maintaining good documentation of workflow and codebase as well as developing processes for scalable software development and stable deployment
- Work on a rapidly changing set of cross-disciplinary projects around software development, as well as contribute to electrical component design, and hardware prototyping

Qualifications:

- Ability to work successfully in a fast-paced team environment/product iteration cycle
- Motivated, driven, startup-mindset, desire to drive positive change in the world
- Embody a mindset of mentorship and give first
- Have experience or good understanding of developing, deploying, and scaling software solutions that are stable and secure
- Experience with React, Javascript, Python, D3, Google Cloud, AWS, and other cloud platforms
- Have experience storing and querying for large time-series data
- Experience or have the ability to quickly pick up working with C, C++, single-board computers/microcontrollers, and industrial communication protocols (ex. Modbus, EtherNet/IP, 4-20mA, OPC UA)
- Worked with or capable of quickly picking up IoT communication and wireless and wired data transmission protocols (ex. MQTT, cellular, LoRa, WiFi, ethernet, RS485, TCP/IP) with security in mind
- Understanding of or capable of picking up on network security and working with firewalls
- Knowledge of ML frameworks, unsupervised and supervised learning, data visualization, and data analysis tools

Location: Greater Boston Area, in-person highly preferred but open to the option of remote work

- Full time position with competitive compensation

Contact:
Please send an email with the role/position you are applying for in the subject line and include your resume, description about yourself, start date, and other relevant info/materials to careers@h2okinnovations.com, and CC annie@h2okinnovations.com, david@h2okinnovations.com, and joseph@h2okinnovations.com on it.