Application Engineer

Job Description:

We are looking for an engineer familiar with the engineering processes used in the Aerospace, Automotive, Defense, or related industries.

As an Application Engineer at SmartUQ, you will be a key part of SmartUQ's engineering team. You will educate existing and potential customers on the capabilities and use of SmartUQ's best-in-class AI and machine learning software for engineering applications. You will collaborate with clients, partners, and colleagues to apply SmartUQ's tools to solve engineering challenges from a variety of industries and disciplines. You will support SmartUQ users by demonstrating solutions, building processes, and deploying SmartUQ software. You will generate and document examples, case studies, and educational materials. As part of our research and application development efforts, you will learn about and implement novel solutions based on statistics, predictive modeling, analytics, optimization, and uncertainty quantification.

Who We Are:

SmartUQ (SmartUQ.com) develops an AI and Machine Learning software tool optimized for use in engineering applications from ideation and design to manufacturing and sustainment. SmartUQ provides powerful tools and highly accurate models within a user-friendly GUI (and Python API) ideal for use by engineers with no background in AI and machine learning. SmartUQ makes it easy to perform predictive modeling, optimized sampling, uncertainty quantification, and model calibration. From Fortune 500 manufacturers to startups and engineering consulting firms, SmartUQ's best in class predictive modeling accuracy helps our customers go beyond analysis to bring uncertainty into the decision-making process.

Location:

We have an office in Madison, WI near the UW-Madison campus, but all positions are currently working remotely.

Responsibilities:

- Explain SmartUQ's tool set to prospective customers using engineering knowledge and expertise to understand and address their challenges.
- Actively support clients and partners to ensure they are getting the best results possible and troubleshoot issues they may have with process, implementation, or use of SmartUQ software.
- Engage with commercial partners and consulting customers to understand engineering processes, identify opportunities, propose solutions, create examples, and transfer the established workflows.
- Conduct software and analytics training sessions and webinars.
- Write explanatory materials for training, marketing, educational outreach, and user guides.

- Identify, create, and document engineering analytics examples using commercial simulation tools such as ANSYS, COMSOL, MSC Adams/Nastran.
- Develop processes and integrations for interfacing SmartUQ with commercial partner simulation tools.

Qualifications:

- Bachelor's or Master's degree in Mechanical Engineering, Engineering Mechanics, Aerospace Engineering, Engineering Physics, Biomedical Engineering or related field.
- Broad knowledge of engineering principles (e.g. fluid dynamics, heat transfer, and structural mechanics, chemical processes, electrical systems etc.).
- Experience using engineering simulation tools, e.g. CFD/FEA.
- Excellent communication and writing skills.
- Experience with Python (preferred), MATLAB, R, or similar engineering analysis/data science/scripting language.
- Experience in Aerospace, Automotive, Defense, or related engineering fields preferred.
- Experience with design of experiments, response surface modeling/surrogate modeling/machine learning, optimization, and uncertainty quantification preferred.
- Demonstrated understanding of statistics, data analytics, uncertainty quantification, and machine learning or related topics preferred.

If you feel that you would be a good fit for our team, send your cover letter and resume to hiring@smartuq.com with "Application Engineer" in the subject line of your email.