

R2019419 – React/Full-Stack Software Developer for UAS Traffic Management

Larry Markosian – Hiring Manager

Software Engineer IV

This position is located at NASA Ames Research Center on Moffett Field.

We are seeking a Software Engineer to join the UAS (drone) Traffic Management team. Over the past five years NASA has developed a prototype air traffic management system for unpiloted aircraft systems (UTM) that is on track for adoption by the FAA for small drones throughout the US. UTM will allow large-scale operation of these vehicles in a safe and efficient manner for a wide variety of applications such as small package delivery and agricultural monitoring. NASA worked closely with the FAA throughout development; UTM was tested at the FAA UAS test sites across the country and in downtown Reno, NV and Corpus Christi, TX. We included numerous technological advances in automated air traffic management. The UTM software development team won the 2019 NASA Software of the Year Award. UTM is being adapted for air traffic management of other classes of UAS, including a new class of autonomous aircraft for cargo and personnel transport across urban environments.

Now other Government Agencies are looking to integrate UTM into their operations. The Software Engineer will be tasked with supporting the development of a Federal UTM system to serve multiple agencies with a wide variety of requirements, based on a single architecture. This position will be designing the UTM system to support multiple user roles and views. You will be working in a small team that has the potential for enormous impact on air traffic management throughout the country.

*****Must be a U.S. Citizen*****

Required Education, Experience & Skills:

- MS in Computer Science, Computer Engineering, Electrical Engineering, Aerospace Engineering, or related field
- 6 or more years of experience delivering enterprise class applications, with at least 3 most recent years working in Java/JavaScript and REST APIs.
- Experience with modern JavaScript frameworks (e.g., React, Vue),
- Experience with modern testing frameworks (e.g., Jest, Puppeteer, Cypress)
- Experience building scalable server-side applications using JS framework like express js, node js etc
- Deep understanding of front-end architecture and data-driven development
- Ability to work with designers to develop dynamic user experiences
- Experience with large scale single-page web applications
- Solid understanding of object-oriented design and programming concepts, core Java concepts, multi-threading, MVC, and common design patterns, SQL/NoSQL Databases

- Have a passion for quality and writing clean, solid, readable code that scales and performs well. Strong desire to learn, push the envelope, and share knowledge with others.
- Proven interpersonal communication skills

Preferred Education, Experience & Skills:

- Experience with GraphQL
- Familiarity with TypeScript
- Experience with drone technology
- Familiarity with Mobx, Mobx-State-Tree
- Experience engineering software systems of medium-to-large scope and complexity
- Practical knowledge of agile software development methodologies (e.g., XP, scrum)
- Experience with continuous delivery and infrastructure as code
- *****Extra credit: Provide your GitHub account or StackOverflow profile with your job application!*****