Dashboard Visualization & Front-end Developer Intern at AIDF-CRI

Background

The Asian Institute of Digital Finance (AIDF) is a university-level institute in NUS, jointly founded by the Monetary Authority of Singapore (MAS), the National Research Foundation (NRF) and NUS. AIDF aspires to be a thought leader, a Fintech knowledge hub, and an experimental site for developing digital financial technologies as well as for nurturing current and future Fintech researchers and practitioners in Asia. The Credit Research Initiative (CRI) is a non-profit undertaking under the AIDF. Pioneering the "public good" credit risk measures, the initiative is committed to advancing big data analytics and providing directly useful credit intelligence to academic and professional communities.

Moreover, AIDF-CRI is dedicated to staying updated with the latest trends and technologies, especially for AI and LLMs. We are currently in the process of productionizing an LLM-driven application system to enhance and diversify our credit solutions. This includes improving the frontend framework to not only ensure functionality but also to elevate the aesthetics and user experience.

Responsibilities

AIDF-CRI is actively seeking candidates with a strong passion for frontend development. The selected candidate will play a key role in providing cutting-edge modern credit analytic platform by enhancing our data-driven dashboards and front end to meet professional, market-ready standards, focusing on functionality, aesthetics, and user experience.

Particularly, the responsibilities will include:

• Dashboard Development

- o Design, develop, and maintain interactive dashboards to visualize key metrics and data insights.
- o Work with data sources and APIs to fetch and display data in real-time.
- o Optimize dashboards for performance and responsiveness, ensuring data visualizations are fast and efficient.
- o Collaborate with internal stakeholders to gather requirements and understand metrics, KPIs, and user needs.

• Frontend Development

- o Develop responsive and user-friendly interfaces using frontend frameworks like React, Angular, or Vue.js.
- o Implement frontend components, forms, and interactions with a focus on usability, accessibility, and consistency.
- o Create layouts and user flows that align with UX/UI best practices and brand guidelines.

• Team Collaboration

o Contribute to the entire lifecycle of front-end development, from deployment and optimization to deployment, giving you exposure to full-stack product development.

o Work closely with the backend teams to integrate cutting-edge credit analytic technology into the front-end, allowing users to conduct credit analysis and derive insights through the platform.

• Optimization and Testing

- o Implement and maintain unit, integration, and end-to-end tests to ensure the reliability and performance of front-end components.
- o Collaborate with the QA team to design test plans and participate in user acceptance testing (UAT) to ensure features are fully functional before release.

Documentation

o Document front-end development processes, including design choices, component structures, and performance optimization strategies, ensuring clarity and knowledge sharing within the team.

Minimum Requirements

- Preferably major in the areas of computer science/engineering, business analytics or similar discipline.
- Familiar with at least one programming language (e.g. JavaScript, TypeScript, Python, Java).
- Experience or interest in data visualization and analysis
- Knowledge of frontend development techniques and familiar with a modern web framework (e.g. React, Vue or Next.js, Remix).
- Familiar with web application development and experience in TypeScript/JavaScript, HTML, CSS, or other frontend languages.
- Basic understanding of RESTful APIs and handling API integrations.
- Familiarity with version control systems like Git.
- Strong analytical and problem-solving skills, with the ability to troubleshoot and resolve issues effectively.
- Excellent communication and documentation skills, both written and verbal, to collaborate effectively with team members and stakeholders.

Bonus Skills

- Experience with dashboarding tools like Power BI, Tableau, or custom solutions
- Experience with state management libraries like Redux or Vuex.
- Familiarity with modern build tools (Webpack, Vite) and CI/CD pipelines.
- Understanding of UI/UX principles and experience working closely with design teams.
- Ability to think creatively and propose innovative solutions to complex problems.
- Portfolio or examples of previous dashboard and front-end work, including school projects or internships.
- Exposure to cloud services like AWS, Azure, or Google Cloud for frontend deployment.