Yu Zhou Zhang - Front-End Software Engineer

 London, UK | yuzhou-zhang@outlook.com | yuzhou.codes | yu-zhou-z-16907521a

Profile

Detail-oriented Front-End Software Engineer with 1+ years of experience developing secure and compliant applications in the healthcare technology sector. Specialising in building responsive web apps with React JS and TypeScript, and experienced with modern component libraries including Material-UI. Proven ability to collaborate with UX and DevOps teams to deliver high-quality, rigorously tested software from design to deployment.

Experience

Front-End Software Engineer, Motilent – London, UK   Apr 2024 – present
- Developed core features for a 3D DICOM viewer using React and TypeScript, building structured reporting tools that linked statistical data directly to medical annotations to enhance diagnostic accuracy.
- Championed software quality by writing robust unit and integration tests with Jest and the React Testing Library (RTL), ensuring code reliability in a safety-critical, regulated environment.
- Collaborated on the design and optimization of complex UX workflows in Figma, improving the efficiency of diagnostic tasks for clinical users.
- Played a key role in achieving successful FDA clearance by authoring and managing essential 510(k) regulatory documentation.

Education

Queen Mary University of London, MSc Computing and Information Systems (Distinction)   2023

The Odin Project, Comprehensive Full-Stack JavaScript Curriculum   2023

Royal Academy of Music, MMus Piano Performance   2022

Royal College of Music, BMus Piano Performance   2020

Birkbeck, University of London, BSc Mathematics and Statistics (Part-time)   Ongoing

Projects

Pitchspace - Real-Time Music Theory & Note Visualisation Tool
- Created a responsive music education tool using React and TypeScript, with interactive components and core logic rigorously tested using Jest and React Testing Library.
- Integrated the Web MIDI API and Pitchy.js library to process complex, real-time data streams, providing users with instant audio-visual feedback.

Perpetuo - Full-Stack Teaching Studio Management App
- Architected and built a full-stack web application using the MERN stack (MongoDB, Express, React, Node.js) to centralise business operations for a teaching studio
- Automated scheduling, payment tracking, and student record management, resulting in a reduction of administrative work by over 5 hours per week.
- Implemented a secure user authentication system and developed a responsive, mobile-first UI used in a live business.

Technical Skills

- Frontend: React JS, TypeScript, JavaScript (ES6+), HTML5, CSS3, Material-UI, react-query
- Testing: Jest, React Testing Library (RTL)
- Backend & Database: Node.js, Python, Firebase, MongoDB
- Cloud & Security: Azure, AWS, OAuth2, CI/CD

Certifications

- Baruch College Pre-MFE Program: Advanced Calculus and Machine Learning with Financial Engineering Applications (Distinction)
- AWS - SAA-C03 - Solutions Architect Associate
- GIAC - SEC401 - Security Essentials
- GIAC - SEC275 - Foundational Cybersecurity Technologies
- Microsoft - AZ-900 - Azure Fundamentals