TOH HONG XIANG

Singapore
tohhongxiang@gmail.com
+65 9431 7592

linkedin.com/in/toh-hong-xiang
github.com/tohhongxiang123
portfolio-mu-rosy-74.vercel.app

SKILLS

Tech Stack: HTML5, HTML, CSS3, CSS, SASS, SCSS, JavaScript, TypeScript, Node.js, React.js, Next.js, Remix.js, Vue, SQL, MySQL, PostgreSQL, NoSQL, MongoDB, Firebase, TailwindCSS, Redux, jQuery, Python, Go, C#, Java, NPM, Redis, Express, Rest API, GraphQL, OAuth2, Docker, Jest, Object-oriented programming, Grafana, Golang, Babel, Webpack, Vite, Google Cloud Platform, Stripe, Git, Gitlab, Gitea

Miscellaneous Skills: Accessibility, Software Development Lifecycle, UI Design, Web Development, Full-Stack Development, Front-End Development, Back-end Development, Continuous Integration and Deployment, Unit Testing, Content Management Systems, Test Driven Development, Version Control, Agile Software Development, Scrum, Web Application Development, Natural Language Processing, Computer Vision, Artificial Intelligence and Deep Learning

WORK EXPERIENCE

Private Tutor (Computer Science, Coding, and Math), Self-Employed   **January 2021 - Present**
- Developed personalized lesson plans and assignments tailored to individual needs, improving grades by 30%
- Enhanced student learning by regularly providing feedback and engaging in real-world projects, making students more confident and passionate

Marketplace Intelligence Engineer, Shopee Singapore   **May 2022 - December 2022**
- Enhanced cross-team deployment monitoring capabilities with Grafana, improving deployment efficiency by 20%
- Optimized A/B testing processes with dashboard visuals in ReactJS and Typescript, **enabling data-driven decisions** which resulted in a 20% increase in click-through rates
- Focused on clean architecture principles and automated unit testing to ensure maintainability and testability
- Architectured scalable and performant applications by utilizing Redis and Golang, **reducing latency** by 10%
- Engaged in code reviews to ensure best practices were used, **reducing time spent debugging errors** by 15%

Software Developer, Industrial Electronics Pte. Ltd   **December 2019 - July 2020**
- **Optimized features** for a ReactJS, MongoDB and GraphQL e-commerce application, **improving performance** of trading functionalities by 15%
- Collaborated with content-writers to gather technical requirements and prototype a user-friendly drag-and-drop template builder in ReactJS, **streamlining workflow time** by 15%
- Identified issues and proposed solutions during standups, **achieving milestones 2 weeks ahead of schedule**
- Maintained existing documentation based on user feedback, **decreasing onboarding time** by 20%

PROJECTS

RemixJS Portfolio [https://portfolio-mu-rosy-74.vercel.app/]
- **Achieved accessibility following WAI-ARIA**, improving usability for screen-readers and keyboard-only navigation
- Implemented lazy-loading, caching and Server-side Generation, **decreasing time-to-first-byte** by 20%
- **Integrated modern industry trends** to design responsive UIs, ensuring a mobile-friendly experience

Tuili - Tutor Matching App
- Developed a full stack tutor matching website featuring real-time chats with Websockets, video-calling capabilities, file storage with Firebase, RESTful APIs, and OAuth2 workflows
- Utilized **test-driven-development** with Jest to create robust, maintainable and extensible code
- **Automated regression, unit testing and CI/CD workflows** to ensure smooth, bug-free deployments

Catch my Cadence - Flutter Mobile App for Runners
- Delegated tasks based on **Agile methodologies** to pace development for a tight 2-month deadline, building out multiple features at once without jeopardizing code quality
- Demonstrated leadership by organizing weekly standup meetings within a **cross-functional team** of 6 developers to collate user feedback, troubleshoot issues, and manage project deliverables

Ecosystem Simulation in Unity and C# - Final Year Project
- Examined the program's performance using Unity's profiler, and **optimized performance** using Unity's Job System to take advantage of multithreading, improving frame-rates by 50%
- Implemented modular entity behaviors using **object-oriented programming** and **SOLID principles** to ensure maintainability and extensibility of code across hundreds of files

EDUCATION

Bachelor of Computer Science, Specialisation in AI, Minor in Modern Languages   **July 2020 - July 2024**
(GPA: 4.70/5.0)
Nanyang Technological University. Distinction in Deep Learning, Computer Networking, Database Implementations