# **TOH HONG XIANG**

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Dedicated and versatile Full Stack Software Engineer with a proven track record of delivering impactful solutions across diverse projects. Adept at leveraging strong communication and collaboration skills to drive team success. Excels in problem-solving and thrives in fast-paced, dynamic environments.

#### **WORK EXPERIENCE**

#### Marketplace Intelligence Software Engineer, Shopee Singapore

May 2022 - December 2022

- Enhanced cross-team deployment efficiency by 20% with Grafana monitoring infrastructure enhancements, leading to faster deployment times and increased productivity.
- Reduced back-end latency by 10% with scalable solutions using Redis and Golang, enhancing system performance and user experience.
- Optimized A/B testing processes, resulting in a 20% increase in click-through rates, by creating front-end dashboard visualizations in ReactJS and Typescript.
- Spearheaded adoption of clean architecture principles and automated unit testing, fostering effective collaboration and improving code quality within the team.

#### Software Developer, Industrial Electronics Pte. Ltd

**December 2019 - July 2020** 

- Drove a 15% performance improvement in a ReactJS, MongoDB, and GraphQL e-commerce application by enhancing trading functionalities, aligning with business objectives and customer needs.
- Streamlined workflow time by 15% through collaboration with content writers throughout the full product lifecycle to gather technical requirements and prototype a user-friendly drag-and-drop template builder in ReactJS.
- Identified and resolved issues proactively during standups, achieving milestones 2 weeks ahead of schedule.
- Reduced onboarding time by 20% through active contributions to documentation efforts, refining technical documents based on user feedback and evolving project requirements.

#### **PROJECTS**

#### RemixJS Portfolio [tohhongxiang.com]

February 2024 - March 2024

- Achieved compliance with WAI-ARIA standards by implementing accessibility enhancements, ensuring usability for screen-readers and keyboard-only navigation.
- Reduced time-to-first-byte by 20% through lazy-loading, caching techniques and server-side generation.
- Integrated modern industry trends to design responsive front-end UIs, prioritizing user experience and accessibility across various devices.

# **Ecosystem Simulation in Unity and C# - Final Year Project**

July 2023 - January 2024

- Analyzed program performance using Unity's profiler and optimized performance using Unity's Job System, improving frame-rates by 50%
- Implemented modular entity behaviors using object-oriented programming and SOLID principles to ensure maintainability and extensibility of code throughout the entire codebase.

#### Catch my Cadence - Flutter Android App for Runners

August 2021 - November 2021

- Delegated tasks for a fast-paced 3-month deadline, prioritizing core features and successfully completing the project 1 week ahead of schedule.
- Led a cross-functional team of 6 developers through weekly standup meetings, facilitating open communication, resolving challenges, and ensuring alignment on project goals and priorities.
- Ensured code quality through regular code reviews and adherence to best practices.

# **Tuili - Tutor Matching App**

March 2020 - June 2021

- Developed a full-stack tutor matching website in ReactJS, Typescript and PostgreSQL, with robust chat and with Websockets, video-calling features, file data storage with Firebase and OAuth2 workflows.
- Utilized test-driven-development with Jest to create robust, maintainable and testable code.
- Automated regression, unit testing and CI/CD workflows to ensure smooth, bug-free deployments.

# Uplevel Data Science - Analyzing Jobs in the Data Science Market

**July 2019 - September 2019** 

 Engineered various web scrapers to scrape thousands of job listings across multiple platforms, leveraging NLP techniques and geo-spatial analysis to provide actionable insights.

### **TECHNICAL SKILLS**

Languages: HTML, CSS, JavaScript (ES6+), TypeScript, Node, Python, Go, C#, Java

Frameworks: React, Next, Remix, Express, Jest

Databases and ORMs: SQL (MySQL, PostgreSQL), NoSQL (MongoDB), Redis, Firebase, Prisma

**Deployment and Platforms**: Git, Github Actions, Docker, Grafana, Gitlab, Gitea, Google Cloud Platform, Vercel **Miscellaneous Skills**: Natural Language Processing, Computer Vision, Artificial Intelligence, Deep Learning,

Algorithms and Data Structures

#### **EDUCATION**

# Nanyang Technological University Bachelor of Computer Science, Specialisation in Al

Nanyang Scholarship recipient.

Distinction in Machine Learning, Database Management.

July 2020 - July 2024

GPA: 4.70/5.0