

# RAY TOH HONG XIAN

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## Skills

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Languages: Golang, C++, Python, Java, C#, C, JavaScript  
Databases: PostgreSQL, MongoDB, MariaDB, Redis, Elasticsearch  
Backend: Node.js, Django, RESTful APIs, AWS (S3, RDS, EC2, Lambdas)  
DevOps: OpenShift, Kubernetes, Apache Kafka, Jenkins, Git

## Technical Experience

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### DBS Bank

Singapore

Agile Software Engineering Intern

May 2022 – Jul 2022

- Rolling out production ready and well tested enhancements in Golang to execute all FX transactions
- Integrating code changes and assuring reliability of MariaDB, Redis and Elasticsearch databases
- Containerizing and migrating application to Kubernetes and managing clusters on Open Shift platform

### Reluvate Technologies

Singapore

Software Engineering Intern

Dec 2021 – Feb 2022

- Facilitated weekly UATs, formulated functional requirements and migrated data from legacy systems
- Leveraged on Django REST framework to serve RESTful APIs to client-facing applications in React.js
- Prototyped applications on AWS EC2, databases on RDS and static file hosting on S3

### DSTA

Singapore

Machine Learning Intern

May 2021 – Aug 2021

- Modelled smart behaviors for computer-generated forces using Unity's physics engine
- Compared s Deep Reinforcement Learning methods to improve on existing models
- Incorporated self-attention mechanisms in DRL/MARL to reduce training time by up to 200%

## Open-Source Projects

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### Portfolio Website

Technology Stack: JavaScript, HTML, CSS, SEO

[View on Github](#)

- Initiated an open-source template for mobile reactive and browser compatible website for portfolio
- Acquired and administered a domain name and leveraged on Github Pages as a web hosting tool
- Enhanced Search Engine Optimization, consistently showing on front pages of popular search engines

### E-Commerce Web App

Technology Stack: MongoDB, Express.js, React.js, Node.js, AWS, Redux

[View on Github](#)

- Developed a full-stack web application and deployed it on AWS as a serverless architecture
- Implemented CRUD operations on node.js using JWT Authentication with SHA-256 encryption
- Modelled product information as objects in a MongoDB, improving scalability and schema flexibility

## Education

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### National University of Singapore

Aug 2019 – Current

Bachelor of Computing (Honors) in Computer Science

- Projected Distinction (GPA 4.51/5.0)
- Expected Graduation date: May 2023