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EDUCATION

National University of Singapore

2023 – Present

- Bachelor of Computing, Computer Science with Second Major in Mathematics.
GPA: 4.50
 - Relevant courses: Data Structures and Algorithms, Programming Methodology, Linear Algebra and Calculus for Computing and Mathematical Analysis.

Raffles Institution

2019 – 2020

- GCE 'A' Levels

90 Rank Points

EMPLOYMENT

Wealth Management Intern

Ascendance Wealth Management

2022-2023

- Conducted financial planning for clients, including analysis of financial situations, goal setting, and strategy development. Provided tailored advice to meet individual client needs.
- Conducted in-depth market research to stay informed of financial trends and products. Utilized insights to offer informed advice and recommendations to clients.

Full Stack Developer

Harvest Inc.

2024 - Present

- Developed a dynamic, SEO-optimized blog page using React.js and Next.js, enabling admin-controlled content management
- Built the student-facing interface for an AI-powered script marking product, utilizing React.js and integrating with AWS services
- Contributed to successful funding acquisition by assisting in pitch preparation for NUS VIP, including creation of pitch decks
- Built a RAG-based auto-marking system using OpenAI API for generation and integrated syllabus retrieval with vectorization techniques.

TECHNICAL EXPERIENCE/PROJECTS

Machine Learning -based Workout App:

May 2024 – Aug 2024

- Developing an ML-driven Flutter app that dynamically suggests personalized workouts leveraging PyTorch.
- Utilizes real-time gym equipment tracking and analytics based on user's location, workout duration, physiological status, and historical performance data.

Ray-Tracer:

Feb 2024 – Mar 2024

- Developed a path tracer using C++, focusing on indirect lighting techniques for high-quality image production without external APIs.

Web Forum:

Dec 2023 – Jan 2024

- Developed a web forum as part of the Computing for Voluntary Welfare Organisations assignment. Utilized React.js and TypeScript for a dynamic frontend, and Go for the backend, incorporating RESTful APIs.
- Features include user authentication, CRUD operations for forum threads and comments, and a tagging system.

Market-Making Algorithm:

Apr 2023 – May 2023

- Developed a cryptocurrency market-making algorithm leveraging the Avellaneda-Stoikov framework.
- Utilized advanced quantitative trading techniques and integrated with FTX cryptocurrency exchange APIs to execute real-time, high-frequency trading strategies.

Stock Trading Algorithm:

Jan 2023 – Apr 2023

- Designed and implemented a stock trading algorithm using the IBKR API, integrating stock fundamentals and historical price data.
- Employed a basic LSTM machine learning model to enhance predictive accuracy of stock price movements, facilitating data-driven trading decisions.

ADDITIONAL EXPERIENCE AND AWARDS

- Top 50 in IMC's Prosperity Challenge, an algorithmic trading competition.
- NUS Merit Scholarship for academic excellence.

Languages and Technologies

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- C++; Flutter, Firebase, Python, PyTorch, Java, JavaScript, TypeScript, Go, React.js, Node.js, Next.js, SQL and Git
 - Visual Studio; IntelliJ, VIM Editor, Restful APIs