

SUMMARY

Experienced AI software development with focus on cutting-edge **innovation** and **team leadership**. Proven ability to manage full project lifecycles, from design and development to deployment. Adept at **collaborating** with internal and external organizations to deliver **extraordinary** results.

EDUCATION

Nanyang Technological University

Expect in July 2026

Bachelor's in mathematical and computer science

CGPA: 4.49

WORK EXPERIENCES & INTERSHIPS

Rohde & Schwarz | Software Engineer

Jan 2025 – May 2025

Automation Manager

- Developed a **TCP-based client-server system** that automated overnight Android device testing, handling over **5,000** long-running test cases, and significantly reducing manual testing time by **60%**.
- Designed microservice architecture with gRPC and Consul to ensure **80%** availability and scalability for up to **100** microservice instances across Linux and Windows environments.

AV Media | Project Intern

May 2024 – Dec 2024

Hologram Chatbot

- Developed an interactive AI chatbot to assist over **350 daily visitors** in the Gaia building, with features such as **AI-powered lip-syncing**, realistic **animations**, and audio output to create more engaging user experience.
- Built a full-stack webpage built with **React** frameworks to serve as user interface to manage **data retrieval** and **data management** in **Microsoft Azure services**.
- Built a **RAG** system based, scalable knowledge base for efficient information retrieval, in less than **0.2s** per request.

RECENT PROJECTS (More in [GitHub](#))

StockAI

May 2025 – Recent

- Implemented telegram CLI bot to successfully handle more than **10 command types** for stock researching.
- Integrated and refined LLM workflows to summarize and analyze data from more than **5000 US companies**.

Personal Portfolio AI Assistant

Apr 2025 – July 2025

- Portfolio chatbot that can assist more than **100 visitors** at once in my personal portfolio website.
- Using RAG system to retrieve and provide relevant answers for more than **3,000 question types** in less than **2 seconds**.
- Implemented helpful functionalities such as navigation and API request sending via function calling, all executed within **1 second** with **90%** accuracy.
- Designed chatbot system with **context awareness** to effectively **capture crucial information** and send email message with **100%** success rate.

ACADEMIC PROJECTS

Final Year Project – Prompt Management System for LLM Agents (Ongoing)

Aug 2025 - Recent

- **Skills:** Software design, prompt engineering, MCP, LLM, Machine Learning, Time Series Analysis, Data Analysis, Python, Pandas, Scikit-Learn, Matplotlib

- Architected and deployed a version-controlled prompt management tool that streamlined the creation and management of LLM prompts and templates, improving prompt generation efficiency.
- Design a streamlined workflow for the full prompt lifecycle, from initial design and testing to iterative optimization and refinement for LLM agents.

Use Case: Automated Prompt Engineering Toolkit for Data Science Workflows

- Automated the end-to-end data science workflow for data analysts, generating production-ready Python code for tasks including data cleaning, model building, and comprehensive result analysis.

LEADERSHIP EXPERIENCES

ISAR 2025

June 2025

Event Leadership & Project Management

- Directed all communications and collaboration with external event organizers, venue hosts and internal AV teams to ensure seamless program flow and on-site execution.
- Managed a 10-member team in managing all audiovisual and logistical aspects for **large-scale international event** with participants from multiple countries, including USA, Australia, Netherlands, and Denmark.
- Led the entire AV production lifecycle from pre-event planning and slide creation to live program execution and troubleshooting to ensure **100% on-schedule program flow** and resolve all technical issues in less than **5 minutes**.

NTU Rotaract Club

Aug 2023 – July 2024

Team Lead | Division of Community Service

- Led a team of 20 volunteers to plan, organize, and executed weekly visits for the elderly community members across Singapore.
- Managed all logistics and collaborated with external government organizations to plan and host **2 large-scale events** for seniors over the academic year.

NTU NBS Corporate Support & Facilities

Jan 2023 – Recent

Regular Logistic Team Lead

- Led a team of 15 members for fulfilling logistic requests.
- Managed streamlining logistics and facilities management through effective communication with key stakeholders and university faculty.
- Directed communications and collaborations between university departments and offices.

Annual Dinner Project Lead (2023,2024,2025)

- Overseen AV team of size **5** for slide production and reception team of size **8** for prize coordination to guarantee memorable and professional event for more than **150** attendees.
- Effectively directed communications with **5** university professors and **3** departments faculty to ensure seamless program flow and resolve all technical issues in less than **5** minutes.

MISCELLANEOUS

- **Skills:** Python, React, .NET, gRPC, REST, Microsoft Azure, AWS, Docker, Postgres SQL, DevOps, Firebase, Git, OOP, Data Structures, Algorithms, Google Console, Power BI, Excel, Word, PowerPoint.
- **Soft Skills:** Continuous learning, Team leading, Time management, Team communication/collaboration, Problem-solving, Attention to details, independent working.
- **Interests:** iOS Shortcuts, Musical instruments, Travelling.