

SUMMARY

Final year student with a strong background in **Statistics, Data Analytics** and **Process Optimization**, seeking to leverage technical expertise in a **Learning & Development** capacity. Passionate about using data to identify skills gaps and deploying digital solutions to foster a culture of continuous learning.

EDUCATION

Nanyang Technological University

Expected in Aug 2026

Bachelor's in Mathematical and Computer Science

CGPA: 4.44

ACADEMIC PROJECTS

Multi-Agent Data Analyst Platform | Final Year Project (Ongoing)

Aug 2025 - Present

- Architected a hierarchical agentic workflow (using acyclic directed graph) that **autonomously** decomposes complex user queries into executable sub-tasks, utilizing a **self-correcting** code execution loop to ensure robust data processing.
- Designed a novel "Bias-Contrastive" analysis layer where distinct AI agents assume **specific analytical personas** (e.g. Risk-Averse, Growth Optimist) to debate findings, providing data analysts with **diverse interpretive angles** rather than a single static viewpoint.
- Implemented a "Neutrality Synthesizer" that **mathematically** aggregates divergent agent opinions to filter out subjective noise, producing **objective, statistically grounded** insights that aid in **unbiased** decision-making.

Skills: Multi-Agent Systems (MAS), Hierarchical Task Planning, Prompt Engineering (Persona Injection), Python, LangGraph/LangChain, Data Visualization, Quantitative Analysis.

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

StockAI | NLP-Driven Financial Analytics Pipeline

May 2025 – Aug 2025

- Engineered an automated ETL pipeline** to aggregate real-time financial metrics (P/E, Revenue), ensuring high-quality data availability for fundamental analysis models.
- Deployed a Sentiment Analysis model** to process **unstructured** earnings reports, converting qualitative text into structured sentiment scores to augment trend prediction algorithms.
- Designed dynamic visualization dashboards** to track portfolio risk distribution, providing data-driven alerts that improved investment decision-making speed.

Portfolio AI Assistant | RAG & Agentic Workflow System

Apr 2025 – July 2025

- Architected a Retrieval-Augmented Generation (RAG) system** using Vector Embeddings to query a proprietary knowledge base, optimizing retrieval latency to **<200ms**.
- Implemented "Function Calling" agents** to deterministically map ambiguous natural language queries to precise SQL commands, achieving **90% intent recognition accuracy**.
- Optimized context-window management** for multi-turn conversations, reducing token usage and computational overhead while maintaining response coherence.

WORK EXPERIENCES & INTERNSHIPS

Rohde & Schwarz | Software Engineer (Operations Efficiency)

Jan 2025 – May 2025

Automation Manager

- Optimized operational workflows** by mapping existing processes and identifying bottlenecks, subsequently engineering an automated pipeline that reduced manual administrative load by **60%**.

- **Developed automated reporting dashboards** to track performance KPIs for 5,000+ test cases, demonstrating the ability to **produce periodic controls dashboards** and ensure data accuracy.
- **Conducted root-cause analysis** on complex error logs, applying **methodical and logical thinking** to streamline data collection and improve reporting reliability.

AV Media | Project Intern

May 2024 – Dec 2024

AI Knowledge Management System

- Championed a digital learning initiative by architecting a centralized Knowledge Retrieval System (RAG), facilitating **self-directed learning** by reducing employee information search time from minutes to <0.2 seconds.
- Designed a **learning analytics dashboard** to visualize usage metrics and system performance, enabling stakeholders to **derive insights** on user engagement and knowledge gaps.
- Collaborated with **non-technical stakeholders** to translate business needs into a scalable digital solution, ensuring the platform met organizational **knowledge sharing** requirements.

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

- Managed team size of 15, streamlining logistics and facilities management through effective communication with key stakeholders and university faculty.
- Directed communications and collaborations between university departments and offices.

MISCELLANEOUS

- **Skills:** Python (Pandas, Scikit-Learn), SQL (Postgres), ETL, Power BI, Excel (Pivot Tables), Time Series Analysis, RAG Systems, LLM Prompt Engineering, Machine Learning, Cloud & Engineering (Microsoft Azure, AWS, Docker, Git, CI/CD (DevOps), REST APIs.).
- **HR Technology:** Knowledge Management Systems, Process Automation, Digital Learning Tools, Dashboarding
- **Core Competencies:** Stakeholder Management, Strategic Planning, Agile/Scrum, Process Optimization
- **Personal Interests:** iOS Shortcuts, Musical instruments, Travelling.