

YONG FAH JIN

Applied AI Engineer | Data Analytics & Automation & FinTech

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PROFESSIONAL SUMMARY

Applied AI and Data Analyst with hands-on experience building AI enabled products, integrating AI APIs, automating analytics workflows, and developing Python and JavaScript applications. Combines software engineering, business operations, IoT monitoring and data analysis experience to turn ambiguous workflows into practical tools, dashboards and stakeholder ready insights. Experience includes an AI video transcription and translation platform, a Toyota B2B recommendation engine, an AI hackathon PWA, and scaling IoT production monitoring from 40 to 500 devices. Currently completing NTU's FlexiMasters in Financial Technology, with interest in applied AI, automation, platform analytics and FinTech.

CORE AI & TECHNICAL SKILLS

AI Engineering: LLM integration, generative AI APIs, prompt engineering, multimodal workflows, RAG concepts, MCP concepts, AI workflow prototyping, speech-to-text, text-to-speech, image generation

Programming & Web: Python, JavaScript, SQL, ReactJS, NextJS, VueJS, NodeJS/Express, FastAPI, Flask, REST APIs, microservices

Data, Cloud & Tools: pandas, numpy, scikit-learn, PostgreSQL, BigQuery, Grafana, Google Analytics, Google Tag Manager, Hotjar, GCP, Azure, Kubernetes, Vercel, Git/GitHub, Linux

Delivery Strengths: AI product prototyping, observability, dashboard engineering, UAT, process mapping, stakeholder reporting, Agile delivery, technical documentation

SELECTED AI PROJECTS & HACKATHONS

Morning Kaki - *AI habit companion and PWA, AI Engineer Hackathon by 65labs, 2026* | [morning-kaki.vercel.app](#)

- Built an AI powered PWA that creates personalised morning nudges using unique token based setup and mobile push notifications after home screen installation.
- Integrated LLM text generation, image generation, Whisper audio transcription and ElevenLabs text-to-speech to create a multimodal user flow during a 7-hour hackathon build.
- Designed for low friction AI adoption by non technical users, balancing practical habit tracking with a simple user experience.

ScribeRabbit - *AI video transcription and translation platform, Sentient.io*

- Built a full stack generative AI product using VueJS, Python FastAPI and GCP, integrating AI APIs to transcribe and translate uploaded videos end to end.

Toyota B2B Recommendation Engine - *collaborative filtering and API microservices, Sentient.io*

- Developed a recommendation engine that surfaced relevant parts based on similar customer behaviour, supporting product discovery and cross selling opportunities.

PROFESSIONAL EXPERIENCE

Remote Monitoring Analyst & Software Developer | Terrenus Energy Pte Ltd | *Jan 2024 - Dec 2025*

- Scaled IoT production monitoring from 40 to 500 solar devices, designing and maintaining 20+ Grafana dashboards for asset availability, alert volumes and incident resolution tracking.
- Reduced incident detection time from several days to under one hour by developing proactive offline device alerting, reducing revenue impacting downtime across the solar portfolio.
- Automated monthly stakeholder reporting with Python, pandas, numpy, PostgreSQL and SQL validation, removing manual data preparation and saving multiple hours per reporting cycle.
- Standardised alert definitions, KPI formulas, SOPs and monitoring workflows to reduce alert noise, improve onboarding and support finance and O&M reporting.
- Supported Azure and Kubernetes deployment activities and translated technical monitoring signals into weekly business summaries and actionable escalations.

Application Engineer (Contract) | Nityo Infotech, Client: DBS Singapore | *Jan 2023 - Sep 2023*

- Implemented production monitoring solutions using Python and observability tools to surface service health indicators and accelerate engineering incident response.
- Developed responsive internal web interfaces using ReactJS and Material-UI to support reporting workflows and daily operational activities.
- Executed monitoring host upgrades and translated operational requirements into measurable metrics, alerts and dashboards for engineering stakeholders.

Application Engineer | Sentient.io Pte Ltd | Dec 2021 - Dec 2022

- Built and maintained ScribeRabbit, a full stack generative AI transcription and translation product using VueJS, Python FastAPI, GCP and the company's AI APIs.
- Developed a Toyota B2B recommendation engine using collaborative filtering and REST API microservices to enhance product discovery and cross selling opportunities.
- Conducted product analytics using BigQuery SQL and implemented GA/GTM/Hotjar tracking to surface funnel performance, user behaviour and conversion insights.
- Worked in sprint-based delivery cycles, translating direct client feedback into backlog items and iterative feature releases.

Business Support Analyst / Operation Analyst | Apple South Asia Pte Ltd | Aug 2015 - May 2021

- Led UAT cycles for internal tools including logistics stock allocation and sales CRM systems, mapping processes, documenting test cases and validating behaviour before rollout.
- Generated service level, staffing, ticket volume and KPI reports that supported leadership visibility, headcount discussions and resourcing decisions across JAPAC.
- Coordinated high-volume enterprise order fulfilment and NPI surge support across Retail, Logistics, Sales, Finance, Planning and external carrier partners.
- Maintained SOPs through multiple restructures and supported onboarding, off-boarding and operational issue resolution within the Regional Operations Center.

EDUCATION & CERTIFICATIONS

FlexiMasters in Financial Technology (FinTech) | Nanyang Technological University (NTU) | Expected Jul 2026

GA100: Generative AI for Automation and Productivity | Heicoders Academy | Completed 2026

Certificate in Software Engineering Immersive | General Assembly | Completed

Advanced Diploma in Python & ML; Certificate in Mobile App Development | Singapore Management University (SMU) | Completed

BSc Business, Second Upper Honours | SIM, University of London | Completed

ADDITIONAL INFORMATION

Citizenship: Singapore Citizen | Availability: Available immediately | Languages: English and Chinese