SON NGO

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AI Scientist with applied research experience in AI agent orchestration, knowledge representation, and predictive machine learning. Translate ambiguous business problems into clear technical requirements, select suitable AI approaches for different bottlenecks, and develop practical solutions that connect research advances with measurable business outcomes.

WORK EXPERIENCE

1. Applied AI Scientist - Starbound Space Solutions (website) July 2026 - Present

- Developed AI-assisted requirements derivation functionality for space mission briefs and ECSS regulations and standards, reducing documentation time by 40% while capturing 98% of engineering implications.
- Implemented ReqIF 1.2 exports and attribute-gap reports to transform extracted requirements into structured, traceable outputs for engineering review and exchange.
- Deployed on-premises LLM services and strengthened backend reliability using TypeScript, NestJS, Prisma and PostgreSQL. Implemented rigorous CI/CD pipelines with Docker-based verification and automated schema, round-trip and integration testing.

2. CSIRO Manufacturing - Machine Learning Engineer Feb 2025 – Feb 2026

- Developed and evaluated an AI application for drug discovery, predicting molecular pharmacokinetic properties to support faster, more cost-effective drug screening.
- Pre-processed large molecular datasets, engineered Graph Neural Network representations, and trained and tuned multi-task models using High Performance Computing and SLURM; achieved a Top 13 ranking among 370+ global participants in an AI-for-drug-discovery challenge, with a macro-averaged relative absolute error of 0.588.
- Collaborated with AI, chemistry, and bioengineering teams to assess practical applicability, produce technical reports, and communicate cross-disciplinary findings to stakeholders.

3. FPT Software - Multi-modal AI Engineer Intern (website) July 2024 – Jan 2025

- Explored the application of multimodal models in manufacturing. Leveraged their ability to process computer vision and human language simultaneously.
- Fine-tuned the BLIP multimodal model for meter reading in a factory setting. Utilised a dataset containing labelled images and question-answer pairs to improve accuracy, thus enhancing operational efficiency for the manufacturing line.
- Achieved 87% meter-reading accuracy on 500 held-out factory images, improving accuracy by 35 percentage points over the pretrained BLIP baseline.

4. Unibuz - Founding Full-stack Developer (website) Sept 2024 – Jan 2025

- Deployed a social media platform that brings together students from different universities. Platform adhered to microservice architecture, with functionalities including social groups, public events, news feed, message chat and marketplace.
- Developed a friendly user interface using React, TailwindCSS and TypeScript. Designed and managed database with MySQL. Experienced with RESTful API development with Supabase.
- Performed agile development, in which the platform's workflow is broken down into small, actionable items. Consistently communicated and updated with the CEO and the project coordinator for feedback and smooth team collaboration.

5. Aetosky - Computer Vision Intern (website) Nov 2023 – March 2024

- Labelled and processed satellite images using QGIS, applying vector polygons to create ground-truth labels, and configured the Mask-RCNN model to generate object masks with enhanced segmentation accuracy.
- Improved the accuracy of the models (for buildings, roads, trees, and recreational pools) by 15% through optimising the ROI ratio to 0.5 and RPN confidence score threshold to 0.9, aiding infrastructure planning efforts.
- Collaborated with supervisors and the project manager to report and analyse deep learning model performance, leading to informed decision-making in model evaluation and smooth MLOps.

WHAT I BUILT

Syncnapse - Organisational AI memory (website)

- A platform allowing users to spawn, customise and invite voice agents into virtual meetings, allowing them to join discussions, raise opinions, interact with participants and take actions like create documents, schedule events, record information, etc.
- Live meeting agents can turn staff conversations and meeting insights into manageable, company-owned memory through human-approved AI proposals, permission layers, and multi-agent synchronisation.

Trustlane - AI-Powered EV Warranty Coordination (website)

- Addressed incomplete warranty evidence and repeated dealer-manufacturer information requests by developing a platform to identify missing documentation before claim submission.
- Integrated dealer and manufacturer AI agents, deterministic requirement checks, and ElevenLabs voice workflows to collect technician evidence, retain auditable transcripts, and support human-reviewed submissions and approval recommendations.
- Validated the prototype through three consecutive internal end-to-end walkthroughs, achieving 8/8 agent-turn checks and 9/9 technician-call checks per walkthrough, supported by a 33-scenario behavioural evaluation suite.

Jarvis – Multimodal AI Assistant (GitHub)

- Developed a PyTorch Siamese neural network for face verification using metric learning and triplet-loss training, achieving 0.9044 ROC-AUC across 8,805 validation image pairs, outperforming the ResNet18 baseline of 0.8368 ROC-AUC.
- Implemented live webcam enrolment and integrated anti-spoofing checks, enabling new users to register through captured reference images and updating identity embeddings without retraining the recognition model.
- Extended the system into a multimodal AI assistant by building a multi-agent pipeline, FastMCP tool-calling workflows, and a FastAPI mobile web interface. Enabled conversational access to vision tools, scheduling and delegated tasks.

EDUCATION

Monash University - Doctor of Philosophy

Generative AI for Regulatory Compliance in Safety-critical domains July 2026 – Present

- My research explores Generative AI-driven methods for regulatory compliance in safety-critical domains, with an initial focus on the Australian space sector.
- The research project is part of the National Industry PhD Program initiative.

Swinburne University of Technology -

Bachelor of Computer Science (Artificial Intelligence), Professional Degree Aug 2022 - May 2026

- **Highlighted skills acquired:** Software Development Life Cycle, Data Science and Analytics, Cloud Computing, Deep Learning Models, Machine Learning Engineering.
- **Highlighted achievements:** top 15% in cohort, scholarship for high academic achievement, GPA 3.6

AWARDS & CERTIFICATIONS

- **Winner, Founder Mode Track - Agentic AI Build Week:** Agentic AI Build Week is the biggest buildathon in South East Asia, organised by **GenAI Fund**.
- **Golden Key International Honour Society Member**: Recognised as the top 15% of high-performing students in all academic disciplines.
- **Deep Learning and Machine Learning Specialisation**: Completed 8 courses on the fundamentals of machine learning and deep learning.

SKILLS

- **Programming Languages**: Python, C#, Linux, SQL, TypeScript
- **Domain-specific skills**: ML Engineer, AI Agent Orchestration, Graph Neural Network, High Performance Computing, Data Embeddings, Knowledge Graph, DevOps, Cloud Computing
- **Frameworks and Tools**: PostgreSQL, Convex, OpenAI Agent SDK, ElevenLabs, Azure Foundry, Claude Code, SLURM, PyTorch, Git, Docker
- **Transferable skills**: Literature Review, Attentive, Problem Solving, Cross-functional Communication, Adaptability