

Aye Su Nandar Michelle

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EDUCATION

Nanyang Technological University (NTU), Singapore

Aug 2024 - May 2028 (expected)

Bachelor of Computing in Computer Science

Current cGPA: 4.52/5.00 (Highest Distinction)

Related Coursework: Data Structures & Algorithms, Databases, Software Engineering, Algorithm Design & Analysis, Object Oriented Design & Programming, Artificial Intelligence

SKILLS

Technical: Python, Java, SQL, JavaScript, TypeScript, React Native, React, Expo, Supabase, TensorFlow, Three.js, GSAP, HTML, CSS, Numpy, Pandas, Django, PyTorch, Docker, Next.js

Languages: English, Chinese, Japanese, Spanish (basic level)

EXPERIENCE

NHG Health x A*STAR

May 2026 - Present

AI Engineer Intern

- Investigating methods to de-identify facial videos while performing accurate rPPG to estimate heart rate, to be used at NHG Health by patients using computer vision models (OpenCV, vision transformers, and deep state space models)
- Achieved 93% success rate in de-identification, with a 0.42 MAE in heart rate estimation on the current dataset

A*STAR X LKCMedicine (nairlab)

ep 2025 - June 2026

Student Researcher

- Benchmarking deep state space models (SSMs) including MambaVision as feature extractors for frame-level animal behavior classification on the CalMS21 dataset (~1M annotated frames) enabling downstream classification
- Training XGBoost classifiers on frozen SSM embeddings and compared model performance using macro F1 score across behavior classes, benchmarking SSM architectures against SigLIP vision transformer baseline

DotB (Vietnam, Ho Chi Minh City)

Dec 2025 - Jan 2026

Developer Intern

- Created Python automation scripts for Zabbix monitoring infrastructure in Docker to track server health and report runtime analytics across 100+ hosts via Zabbix API
- Designed automated host provisioning workflow on Zabbix, reducing manual configuration errors by 100%
- Deployed Next.js web application to production using Nginx reverse proxy with a health monitoring endpoint in PHP

PROJECTS

NTU Deep Learning Week Hackathon (Top 10 Finalists)

Mar 2026

- Created an AI system collating social media posts to deliver real-time disaster damage intelligence to rescue authorities, with a React/TypeScript dashboard
- Embedded posts using CLIP ViT-B/32 with DBSCAN clustering pipeline to spatially group posts into location clusters
- Fine-tuned Google ViT-B/16 on a 18K image-label dataset to classify disaster imagery by severity, achieving 82% test accuracy
- Architected MLPs for binary post informativeness classification and aid-type categorisation of location clusters, with validation loss converging at 0.41

Reimagine Learning with Learning Analytics Hackathon (3rd Place)

Aug 2025 - Oct 2025

- Engineered ML pipeline using CatBoost, XGBoost, and ensemble methods to predict study time
- Constructed AI-powered features with Gemini API: learning style classifier and customised quiz generation
- Built interactive mind-map visualisation feature using D3.js force-directed graphs and React Flow
- Developed Django REST API backend with MySQL, integrating ML predictions with React frontend

Munch

Jun 2025

- Led 5-member team to develop a real-time collaborative restaurant discovery app with Tinder-style swiping using React Native and TypeScript
- Architected scalable backend with Supabase real-time subscriptions for concurrent group sessions and live vote sync
- Integrated Google Places API with custom geolocation filtering to surface top restaurant recommendations

LEADERSHIP & CO-CURRICULAR ACTIVITIES

NTU College of Computing & Data Science (CCDS) Transitional Orientation Programme

Oct 2024 - Aug 2025

Chief Group Leader

- Spearheaded the planning and execution of orientation activities with 10 Group Leaders for 70 incoming freshmen, ensuring fair delegation of responsibilities and smooth cohesive program delivery

NTU Pioneer Hall PARAD18M Dance Group

Sep 2024 - Mar 2025

Member

- Collaborated with team members in choreography of dance performances, planned weekly dance practices and rehearsals, strengthening coordination and communication skills
- Participated in interhall dance showcase and won 3rd place in Hall Olympiad Closing Ceremony Dance Competition