

THET NAING AYE

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PROFESSIONAL SUMMARY

Full-Stack Software Engineer | AWS Certified Solutions Architect – Professional

6+ years of experience building healthcare web applications at a genomics startup using React, Python and serverless architectures on AWS and GCP. Transitioned to software in 2017 and progressed to Software Engineering Lead, demonstrating adaptability and team leadership. Brings 10 years of marine heavy-lift engineering experience, with a disciplined approach to safety-critical operations and systematic problem-solving. Pursuing a Master of Engineering in Software Systems Engineering and seeking co-op opportunities to contribute technical and problem-solving skills while gaining exposure to Canadian industry practices.

EDUCATION

Master of Engineering in Software Systems Engineering (ongoing)	2025–Present
University of Regina Regina, SK Current Graduate Grade Point Average: 94.5	
Graduate Diploma in Systems Analysis	2017–2018
National University of Singapore Singapore Cumulative Average Point (CAP): 4.89/5.00	
Awards: ISS Prize Award; Accenture Best Internship Project Award	
Master of Science in International Construction Management	2011–2013
Nanyang Technological University Singapore	
Bachelor of Engineering in Naval Architecture	2002–2007
Myanmar Maritime University Myanmar	

TECHNICAL CERTIFICATIONS

AWS Certified Solutions Architect – Professional | Expires Dec 2027

Microsoft Technology Associate: Software Development Fundamentals (98-361)

TECHNICAL SKILLS

- **Languages:** JavaScript, Python, HTML/CSS, Google Apps Script, PHP, C#, Java
- **Frameworks & tools:** React, Express.js, Serverless Framework, AWS Amplify, Flask, Django, ASP.NET, Java Spring, Docker, AI-Tools (Codex, Claude Code, Antigravity)
- **Cloud & systems:** AWS, GCP, Linux system administration
- **Databases:** NoSQL (DynamoDB, MongoDB), RDMBS (PostgreSQL, MariaDB, SQL Server)
- **Methodologies & practices:** Agile development, UX design, object-oriented analysis and design (OOAD)
- **AI & ML:** Training, fine-tuning and deployment of CNNs and transformer models
- **Blockchain:** Solidity, smart contracts, Hardhat, MetaMask, Ethereum, Polygon PoS

SOFTWARE ENGINEERING EXPERIENCE

Lucence Diagnostics Pte Ltd Singapore	Nov 2018 – Jul 2025
Software Engineering Lead	Jul 2022 – Jul 2025
• Designed and deployed serverless web applications using React, Python, AWS Lambda and Google Apps Script, automating laboratory workflows and reducing turnaround time from 14 to 5 days. • Upgraded web application security architecture with external auditors, passing third-party penetration testing to support U.S. healthcare partnership. • Built an in-house AWS data synchronization pipeline for genomic sequencing machines, enabling high throughput transfers at lower operating costs without relying on costly AWS direct connect service.	

- Mentored junior developers through code reviews and personalized learning plans, enabling them to learn the software stack within one month and handle development tasks with minimal supervision.

Software Engineer

Nov 2018 – Jun 2022

- Developed and tested full-stack applications and microservices using React and Python to automate laboratory workflows.
- Streamlined laboratory report delivery through a workflow requiring medical director approval before release to reduce report-sending errors and manual processing.
- Built and deployed a COVID-19 testing platform prototype in three days; the platform passed a Ministry of Health audit and later supported 2,000 reports per day, up from 10.
- Resolved software defects through cross-functional troubleshooting to support reliable healthcare operations.

Application Developer (Intern)

Feb 2018 – Jun 2018

Infineon Technologies Asia Pacific Pte Ltd | Singapore

- Enhanced a semiconductor wafer defect analysis tool using Java, XML, R and batch scripts for data extraction, processing and visualization.
- Automated data processing and reporting workflows during a 20-week internship; received the Accenture Best Internship Project Award.

ACADEMIC PROJECTS

Vehicle Damage Assessment with Explainable AI

2026

- Trained a ResNet-50 model using TensorFlow and deployed it in a React/FastAPI prototype with Grad-CAM explanations to classify vehicle damage and support human review of insurance claims.

Medical Form OCR Extraction and Blockchain-back Audit Logging

2026

- Fine-tuned a transformer-based model for OCR tasks to extract data from medical order forms for human review; used Solidity on Polygon PoS to record tamper-evident audit hashes while keeping medical data off-chain.

University Stationery Store Inventory System

2017

- Built a university stationery inventory and ordering web application using ASP.NET, SQL Server and an Android extension to help staff manage stock and supply requests; led code integration across the team using GitHub.

Mechanic Workshop Inventory Management System

2017

- Built a workshop parts inventory system using Java, Spring MVC, Spring Security, JPA and MySQL to support stock management and secure access; led code integration across the team using GitHub.

OTHER ENGINEERING EXPERIENCE

Assistant Lifting Manager

Jun 2013 – Jun 2017; Feb 2012 – Sep 2012

Asian Lift Pte Ltd | Singapore

- Managed engineering teams and multinational heavy-lift projects through systematic design reviews and risk assessments, applying Noble Denton guidelines to meet client requirements and support safe operations.

Assistant Operations Manager

Oct 2012 – May 2013

Masstrans Pte Ltd | Singapore

- Provided offshore heavy-lift consultancy on vessel selection and budgeting to support feasible transport plans.

Lifting Engineer / Naval Architect

Sep 2007 – Feb 2012

Asian Lift Pte Ltd | Singapore

- Designed heavy-lift rigging and verified vessel stability using AutoCAD and engineering calculations, following Noble Denton guidelines to establish safe operating limits.