

Caleb Ng

Mobile: +65 94596038 | Email: caleb.ng@u.nus.edu | www.linkedin.com/in/calebngyy | <https://caleb.sg/>

EDUCATION

NATIONAL UNIVERSITY OF SINGAPORE

Jul 2023 - Dec 2026

Bachelor of Computing in Computer Science (Honours)

Relevant Coursework: Object-Oriented Programming, Discrete Structures, Calculus for Computing, Computer Organisation

WORK EXPERIENCE

AZENDIAN SOLUTIONS *Software Engineer*

Mar 2023 - Jul 2023

- Developed a Computerized Maintenance Management System (CMMS) website & mobile application for Keppel Infrastructures leveraging React & React Native, achieving green-mark certification & saving over \$300,000 in infrastructure-related costs.
- Engineered REST APIs for various features with Node.JS, Express.JS, and PostgreSQL, and constructed respective frontend application flow.
- Optimized PostgreSQL queries & databases resulting in improved performance by up to 90%.
- Created and updated Python scripts allowing ease of access to add information into PostgreSQL databases from Excel & CSV with 100% precise and reliable data transfer.
- Led and managed a team of four in the conception and development of the user management and activity log modules, driving creation and implementation one week before project finalization.
- Technologies used: NodeJS, PostgreSQL, Express.JS, React, React Native, Git, Next.JS, Typescript, Javascript, Python.

FABRICA.AI *Software Engineer*

Jan 2023 - Feb 2023

- Established makefiles to automatically mount files needed to build docker containers required in testing and for Raspberry Pi (RPI), revising the streamlining of the Docker mounting process, improving workflow by 50%.
- Developed bash scripts in Linux to automate the recording process of multiple RPIs and visualization to only a single script resulting in increased productivity on the operations side when the robot is deployed in real-life trials.
- Crafted and modified Docker files for deployment in computer vision and logic RPIs, along with testing developmental builds in robot simulations (Gazebo), meeting project timelines with a 100% delivery rate.
- Deployed & developed feature modules and behavioural logic for tile-grouting robot using both C++ and Python with Robot Operating Software (ROS) as the framework.
- Technologies used: Linux, Bash, Shell Scripting, Python, C++, ROS, Docker, Git.

CURRENT PROJECTS

Caleb.sg, *Software Engineer*

Nov 2022 - Present

- Established a Personal portfolio website. receiving over 300 page views.
- Utilized React to construct majority of the frontend & capitalised on React's reusable components to ensure scalability & efficiency.
- Technologies used: Javascript, NextJS, Tailwind.CSS, React, Netlify.

CERTIFICATIONS

- AWS Solutions Architect -Associate | Amazon Web Services

SKILLS

Programming Languages: Python, Java, JavaScript, TypeScript, SQL, C

Libraries & Frameworks: ReactJs, NextJs, Flask, React Native, ROS, Tailwind, Express.JS

Databases: PostgreSQL, SQL, MongoDB

Tools: Jira, Amazon Web Services, Shell Scripting, Docker, Kubernetes, Git