

John Ling

johnlingbusiness@gmail.com | johnling.me | linkedin.com/in/John-Ling | github.com/John-Ling | +61 0494060628

SUMMARY

- **Full-Stack Software Engineer** with hands-on experience building scalable web applications, responsive UIs, and robust APIs across fintech, productivity, and education, delivering full product cycles from conception to deployment.
- Broad technical toolkit spanning **front-end** (**React**, **AngularJS**, **NextJS**, **Tailwind/SASS**), back-end (**Flask**, **NodeJS**), **component libraries** (**MaterialUI** / **ShadCN UI**), and **infrastructure** (**Docker**, **Firebase**, **MySQL**).
- Proven collaborator in **Agile teams** working closely with **designers**, **product owners**, and engineers, contributing to UX reviews, sprint meetings, and feedback loops with an iterative development mindset.
- 1 year experience in both C# (winforms/WPF) and Python (FastAPI/Flask). Similar experience in Java.

SKILLS

Languages: Python, **Typescript/Javascript**, MySQL, C++, C#

Frameworks: **NextJS**, **React**, Angular, Flask/FastAPI, Tailwind, SCSS, MaterialUI, Shadcn UI

Tools: **Git**, Firebase, MongoDB, Vercel, **Docker**, **Linux** (Ubuntu/RHEL), Oracle Cloud

General: **Technical Writing**, Communication, Conflict Resolution, Resilience, Creativity, Time Management

EDUCATION

The University of Melbourne — BSc Computing and Software Systems

Feb 2024 - Nov 2026

- Grade: 74 (Credit)

WORK EXPERIENCE

Frontend Developer — Centelon Solutions

Nov 2024 – Feb 2025

- Built a multi-page, responsive **AngularJS** frontend for a financial credit application system serving Australian tradespeople, transforming business requirements into aesthetically pleasing components.
- Collaborated within a cross-functional team including a graphic designer, software engineer and product owner, employing Agile practices, including frequent stand-up meetings and weekly sprints, to effectively deliver software under tight deadlines.
- Engineered a modular form system structured around **JSON** schemas allowing for easy form creation enabling seamless developer-driven expansion.
- Ensured compliance with Web Content Accessibility Guideline by implementing both semantic HTML and optional keyboard navigation to provide an inclusive user experience.

Full Stack Development Intern — AmBank

Nov 2023 – Jan 2024

- Delivered a full stack web application that delivered tailored financial advice through a Retrieval-Augmented Generation (**RAG**) system and enabled comparison of over **1,000 Malaysian** companies for investment.
- Implemented **Flask** as the backend to orchestrate business logic such as making API calls to the LLM, created a frontend using **React** and **SCSS** and leveraged **MySQL** to store company data.
- **Developed a Work-From-Home reservation web application that reduced processing delays for remote work requests in an office of 60 employees.**
- Gathered and analyzed **user feedback**, incorporating insights into an **iterative development cycle to enhance user experience**, features and UI, resulting in improved usability and satisfaction.

PROJECTS

Winning Hackathon Project at the University of Melbourne

- Developed a web application that parses unstructured task descriptions and leverages Claude Opus to generate a personalized timetable to aid overwhelmed students in managing the university workload.
- Implemented the UI using **React with Vite** in conjunction with a **Flask-based RESTful API**.
- Integrated Anthropic's API with prompt tuning strategies, leveraging output formatting techniques to ensure syntactically valid JSON responses with an accuracy rate of 99%.
- Deployed the application on an **Ubuntu**-based VPS using **Docker** containers, incorporating **Docker Compose** to easily manage multiple containers for both the frontend and backend. **Integrated containers with an existing NGINX system via reverse proxy.**

Full-Stack Journaling Application

- Currently working on a FARM-stack journaling app that uses a RAG system to answer questions about their own journal entries for better reflection.
- UI was done via **NextJS** and **ShadCN UI** to hasten development.
- Backend is implemented with **MongoDB** and a **FastAPI middleware** to handle authentication and CRUD.
- Next Route handlers are used in a Backend-for-Frontend design to hide access tokens from client.
- Implemented both **client and server-side route protection** for session management and **protection of sensitive data from other users**.
- Integrated application with local LLM system via **ChromaDB** and **Langchain** to allow for **opt-in personalised advice based on entries through a RAG system**.
- Planning to enter the project into a startup contest.

Trello Browser Extension

- Created a fork of an open-source browser extension specifically designed to integrate and display Trello Todo lists directly on the browser homepage, enhancing user accessibility and productivity by providing immediate task visibility.
- Designed the interface using **React** and made requests to **NodeJS Firebase cloud functions** that acted as proxies to the Trello API to ensure secure client-server separation and eliminate client-side exposure risk.
- Collaborated with project maintainers to enforce strict code style compliance and executed extensive integration testing to ensure compatibility and stability across the existing codebase.

Wikipedia Web Game

- Lightweight, responsive, web game developed as a puzzle game. Navigate from random Wikipedia pages A to B in under 10 links.
- Utilised **Vite**, **React**, **SCSS** and the Wikipedia API with both Postman and cURL for testing.
- **Implemented HTML sanitisation to prevent potential XSS vulnerabilities discovered in the application during testing.**