# CHRIS KOAY

https://chrisyeesk.com
chrisyeesk@gmail.com | 0448581566 | Full Working Rights until DEC 2028

## SUMMARY

I am a software engineer focused on building full-stack applications using the latest technologies, such as **Next.js, Typescript, Node.js, Python, Drupal and Framer Motion**. I have 1 year of professional web development experience. I hold an **AWS Certified Developer – Associate** certificate.

## SKILLS

**Language**: HTML, CSS, JavaScript, TypeScript, Java, Python, PHP, Visual C#.NET, VB.NET, MATLAB
**Frontend**: Next.js, Tailwind CSS, TypeScript, React.js, Shadcn, MUI, Redux Toolkit, Jquery, React Native
**Backend**: Node.js, Express.js, Postman, GraphQL, Python Fast API, LangChain, PHP, XAMPP, Solr
**Web Testing**: Playwright, Cypress, Artillery, Jest, React Testing Library
**Database and storage**: MySQL, PostgreSQL, MongoDB, Firebase, AWS S3
**DevOps**: Github CI/CD, Docker, AWS EC2, AWS ECS Fargate
**Automation**: PLC (Keyence), Arduino, Raspberry Pi, ABB RobotStudio, 3D printing (UltiMaker Cura), 3D Design (Solidworks)

## EXPERIENCE

**Web Development Officer (Contract) |** State Library of Queensland, Brisbane, Australia                    **Apr 2024 - present**
- In charge of building the Queensland Colonial Secretary Website in both frontend and backend using Next.js, Typescript, Tailwind, MUI, PHP, Drupal, MariaDB, Solr, Docker and Lando.
- Maintained and fixed bugs for Queensland Government websites.
- Set up Tailwind and MUI themes.
- Migrated old websites which uses MUI v4 to MUI v5.
- Used Apache Solr to speed up search queries, create faceted search, pagination, sort query results, filter query results and advanced filtering using AND, OR and NOT logic gates.
- Built backend API endpoints using PHP and debug the API endpoints using XDebug.
- Configured Drupal pages and created/edited site content using Drupal.
- Wrote a data migration script to migrate and reformat data using Drupal migrate API.
- Improved Query Efficiency using TanStack Query.
- Set up query parameters for keyword search, sorting, filtering and page number.
- Mastered lando CLI commands such as lando config, composer install, drush uli, destroy, stop, update, logs, etc.
- Set up and import fonts from Typography.com.
- Version control using Gitlab.

**Software Engineer Intern |** Sindy Labs, Melbourne, Australia                    **Jan 2024 – Mar 2024**
- Contributed to building a full-stack application using Next.js, Typescript, Tailwind, Python Fast API, Shadcn and PostgreSQL.
- Built a Retrieval-Augmented Generation (RAG) Chatbot using LangChain.
- Deployed multiple docker containers application to AWS ECS
- Automated CI/CD workflow using GitHub Actions.
- Built Sign-in and Sign-up pages using Clerk and assign user roles (admin and normal user) to user accounts using Clerk's API.
- Created automated email templates using React Email and sent automated email using Resend.
- Built backend API endpoints for PostgreSQL CRUD operations using Python Fast API.
- Wrote end-to-end testing scripts using Playwright and Cypress
- Performed website load testing using Artillery.

**Frontend Web Developer Intern |** Webby Group, Kuala Lumpur, Malaysia                    **Nov 2022 - Feb 2023**
- Contributed to building a full-stack application using Typescript, React.js, Redux Toolkit, Material UI, MongoDB and Node.js.
- Designed and built MongoDB Database. Created GraphQL Schema to interact with MongoDB Database.
- Built backend API endpoints using Express.js and Node.js and worked on website translation using i18next module.

**Process and Equipment Engineer |** Intel Corporation, Penang, Malaysia                    **Mar 2020 - Sep 2021**
- Created a Visual C#.NET software to track equipment parts changed.
- Automated equipment log file analysis using Python and send automated reporting emails using Python.
- Coached technicians to troubleshoot and fix Intel CPU manufacturing equipment.
- Implement product quality control and preventive measures to ensure high product reliability.

**Process Engineer Intern**                                    **Nov 2018 - Jan 2019 & Nov 2017 – Jan 2018**
Advanced Energy Industries, Shenzhen, China
- Automated an arc testing process by building a machine using PLC and VB.NET, resulting in 20% reduction in process cycle time
- I built the electrical control box to store the PLC controller, circuit breaker, power supply and relays.
- I worked with a supplier to build the hardware of the machine and submitted an Engineering Change Order to use it in production.

## EDUCATION

**Master of Information Technology (Specialization: Computing)**                    **Jan 2022 - Dec 2023**
**The University of Melbourne**
- Relevant courses: Internet Technologies, Algorithms & Complexity, Programming and Software Development, Database Systems & Information Modelling, Software Modelling & Design, Distributed Systems, Software Processes & Management, Advanced Database Systems, Software Project, Introduction to Machine Learning, Al Planning for Autonomy, Computer Vision, NLP

**Bachelor of Mechanical Engineering (Honours)**                                    **Jan 2016 - Dec 2019**
**Monash University**
- Relevant courses: Engineering Mobile Apps, Programming for Engineers, Robotics, Electrical Circuits, Electromechanics, Advanced Engineering Mathematics, Engineering Mathematics, Leadership & Innovation, Accounting for Managers, Final Year Project

## PROJECTS

**Portfolio Website - https://chrisyeesk.com**                                    **2024**
- Tech Stack: Next.js, Typescript, Tailwind CSS, Aceternity UI, Framer Motion and Shadcn.
- The AI assistant chatbot is built using LangChain and OpenAI api.
- The domain was purchased through AWS Route 53 and deployed to AWS EC2 using Nginx.

**Chris' AI Assistant - https://chris-assistant.com**                                    **2024**
- Chris AI Assistant is an AI chatbot built using Retrieval-Augmented-Generation (RAG) concept. It allows people to ask questions about my skills, work experience and educational background.
- Tech Stack: Next.js, Typescript, Tailwind CSS, LangChain, OpenAI api and Shadcn.
- The domain was purchased through AWS Route 53 and deployed to AWS EC2 using Nginx.

**Final Year Software Project (University of Melbourne, Melbourne, Australia)**                    **2023**
- Designed and built a full-stack application for an Australian Basketball Team. The team adopted Scrum Methodology.
- Tech Stack: React.js, Redux Toolkit, Express.js and MongoDB.
- Deployed the full-stack application to AWS EC2 and set up GitHub CI/CD workflow.
- Set up Firebase and configured the CORS policy.
- Set up MongoDB database and created CRUD API endpoints using Express.js to interact with the database.
- Wrote testing scripts using React Testing Library and Jest.
- Designed website UI using Figma.

**Multiple-user Shared Whiteboard Desktop Application (University of Melbourne – Distributed Systems Subject)**    **2023**
- Designed and built a whiteboard desktop app using Java where users can collaboratively draw, insert shapes, erase objects etc.

## CERTIFICATES

- AWS Certified Developer – Associate (Mar 2024)
- Coursera/AWS - AWS Cloud Practitioner Essentials (Jan 2024)
- Coursera/IBM - Developing Back-End Apps with Node.js and Express (Jan 2024)
- Coursera/IBM - Introduction to Containers w/ Docker, Kubernetes & OpenShift (Jan 2024)
- Udemy - Next JS: The Complete Developer's Guide (by Stephen Grider) (Jan 2024)
- Codecademy - Learn Jquery Course (Jan 2024)
- Codecademy - Learn React Testing (Jan 2024)
- Codecademy - Learn React Native Course (Jan 2024)
- Codecademy - Learn Intermediate PHP Course (Jan 2024)
- Codecademy - Learn PHP Skill Path (Jan 2024)

## REFERENCE

**Mankit Au**
Manager at State Library of Queensland
0413 757 327