Lachlan Wright

<u>LinkedIn Profile</u> | <u>GitHub Profile</u> | <u>Portfolio Website</u> | <u>lachlanbwwright@gmail.com</u> | 0499469600

About Me

I am currently finishing a Bachelor of Software Engineering at UTS, due to be completed in November 2024. I am passionate about all aspects of software development, and am looking to specialise in full-stack web development. I am seeking employment opportunities to further my existing competencies, and to improve my capabilities with new technologies and frameworks.

Education & Certifications

Bachelor Of Engineering (Honours) (Software Major)

Feb 2020 - Nov 2024

University of Technology Sydney: Academic Transcript | Dean's List Certificate 2023, 2024

- Attained a total of 147 Credit Points.
- Achieved a Weighted Average Mark of 85.62%, and a distinction Grade Point Average of 6.41/7.00.
- Obtained position on 2022 and 2023 Dean's Lists.

Microsoft Certified: Azure Fundamentals

Jul 2021

Microsoft: Digital Certificate

• Exhibited knowledge of cloud services and how those services are provided with Azure.

Experience

Software Engineer (Internship)

Nov 2023 - Present

Chaos1 (Sydney, NSW)

- Developed a ReactJS website from an existing codebase in a team of 6 over 12 weeks.
- Hired for continued development after the initial internship period.
- Applied Jotai, Immer, and Tanstack Query libraries for state management.
- Leveraged TailwindCSS for styling, and Quill for text-input functionality.
- Assisted team members with technical mentoring and feedback.
- Implemented an end-to-end testing suite executed using Cypress and GitHub actions.

Programmer (Freelancer)

Jul 2024 - Present

DataAnnotation (Remote)

Provided feedback for programming prompts to assist the development of Large Language Models.

Proactive Services Team Member (Casual Employment)

Sep 2022 - Present

Woolworths (Leura, NSW)

• Exhibited strong dedication and consistent performance.

Portfolio

ReactJS Website - Cryogenic Wiring Simulation

Software Development Studio (University of Technology Sydney): Video Demonstration

- Developed a ReactJS website to provide a visual means of interfacing with an existing Python model simulating how a cryogenic computer's wiring influences its performance.
- Directly communicated with clients to clarify specifications and demonstrate progress.
- Built package with interface for Python model using an intuitive JSON data structure.
- Leveraged Flask for serving the website, and creating API endpoints interfacing with the package.
- Used Pyodide to also allow client-side interactions with the package.
- Visualised the model's outputs with Recharts.

NextJS Website - Online Exam System

Software Design Studio (University of Technology Sydney): Repository

• Created a mock website for online invigilation of exams.

- Used NextJS, tRPC, Prisma, Tailwind CSS, NextAuthJS libraries.
- Made comprehensive contributions across the entire technological stack.
- Provided advice, feedback, guidance, and performed code reviews in a collaborative environment.

Node.JS Application - "LBWW Deal Scanner"

Personal Project: Repository

- Developed a TypeScript application, querying retailers' API endpoints using Axios, and directly scraping websites using Puppeteer.
- Interfaced with Discord's API using DiscordJS, creating a bot to allow users to customise what queries are periodically scanned, and to notify users when a matching product has been found.
- Utilised MongoDB via Mongoose, and later SQLite via Prisma to persist queries created by users.

MERN Stack Website, React Native Application - "MERN Mafia"

Personal Project: Video Demonstration | Repository

- Created an online chat-based game built with a website using ReactJS, a mobile application using React Native, and a backend using NodeJS.
- Used JavaScript and Bootstrap to construct the MERN Stack, and TypeScript to construct the React Native application.
- Constructed an object-oriented backend for handling game logic, making use of polymorphism.
- Implemented SocketIO for handling user-server communication using WebSocket connections.
- Utilised ReCAPTCHA V3 verification and interfaced with a MongoDB Database via Mongoose.

Pangea Resource Edit

Personal Project: Repository (RSRCDump, Frontend)

- Developed a React-based level editor for the open-sourced 2001 video game "Otto Matic".
- Forked and extended the Python "RSRCDump" library for editing MAC OS Resource Fork files to support padding bytes, improve support for struct arrays and non-CLI access to features.
- Used Pyodide with the forked library to convert level files to JSON and back after modification.
- Used Konva to create a drag-and-drop interface for editing level data.

Flutter Application - Public Transport Timetable Application

Personal Project: Repository

- Developed a Flutter mobile application for viewing public transportation timetables in NSW.
- Constructed interfaces with Transport for NSW's OpenData API.

Technical & Core Capabilities

Languages

TypeScript, JavaScript, Python, Dart, Java, Kotlin, C.

Frontend Frameworks

ReactJS (React Native, React DOM), NextJS, Svelte, SvelteKit, Flutter.

Fullstack Libraries

Jotai, Immer, TanStack Query, ExpressJS, tRPC, SocketIO, Flask, Bootstrap, Tailwind CSS, Recharts, Pyodide.

Testing and Integration

Vitest, Pytest, Cypress, GitHub Actions.

Deployment

Docker, Heroku, Google Cloud, Azure.

Database Management

Prisma, SQLAlchemy, Mongoose, SQLite, PostgreSQL, MongoDB.

Data Science

Tensorflow, Numpy, Pandas.

Software

VS Code, IntelliJ, Microsoft Office, KNIME, MATLAB, Microsoft Azure Portal, Jira.

Teamwork Skills

Exhibited by an effective collaboration regarding highly-graded group projects across multiple subjects.

Communication Skills

Demonstrated by effective communication in group-oriented assignments during the bachelor's degree.