# Lachlan Wright

LinkedIn Profile | GitHub Profile | Portfolio Website | lachlanbwwright@gmail.com | 0499 469 600

#### About Me

I have recently concluded a Bachelor of Software Engineering at UTS. My studies and experience have had a primary focus on full-stack development, in addition to data science and low-level languages. I am seeking employment opportunities to further my existing competencies, and to expand my capabilities.

# Education

### Bachelor of Engineering (Honours) (Software) - UTS

• Completed degree with 198 credit points, with a WAM of 85.97%, and a GPA of 6.47/7.00.

### Experience

#### Software Engineer - Chaos1 (Sydney, NSW)

- Developed a NextJS website in a team of 6 interns, before being hired for continued development.
- Provided team members with technical mentoring, guidance, and code reviews.
- Implemented an end-to-end testing suite executed using Cypress and GitHub Actions.

# Portfolio

#### Pangea Resource Edit (Personal Project): <u>Website</u> | Repository (<u>RSRCDump</u>, <u>Frontend</u>)

- Formulated a React-based, drag and drop level editor for the 2001 Macintosh game "Otto Matic".
- Forked and extended the Python "RSRCDump" library for editing MacOS Resource Fork files to support padding bytes, improve support for struct arrays and non-CLI access to features.
- Used Pyodide with RSRCDump to convert level files to JSON and back after modification.

#### Cryogenic Wiring Simulation (UTS Project): Video Demonstration

- Developed a ReactJS website for visually interfacing with a Python model simulating how a cryogenic computer's wiring configuration influences its temperature and performance.
- Communicated with clients to clarify specifications and demonstrate progress.

#### Online Exam System (UTS Project): Repository

- Created a mock website for online invigilation of exams with NextJS, tRPC, Prisma, and TailwindCSS.
- Provided advice, feedback, guidance, and performed code reviews in an 8-person team.

### Deal Scanner (Personal Project): Repository

- Devised a TypeScript application for monitoring online retailers to find and notify users of deals, deployed using Heroku alongside a database hosted using Turso.
- Queried endpoints, scraped websites with Puppeteer, and sent notifications leveraging DiscordJS.

#### • Utilised an SQLite database via Prisma to persist queries created by users.

### Online 'Mafia' Game (Personal Project): Video Demonstration | Repository

- Constructed an online chat-based game built with React, in addition to a React Native mobile app.
- Constructed an object-oriented backend for handling game logic with TypeScript.
- Handled bidirectional user-server WebSocket communication using SocketIO.
- Utilised ReCAPTCHA V3 verification and interfaced with a MongoDB Database via Mongoose.

### Public Transport Timetable (Personal Project): <u>Repository</u>

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

# **Technical & Core Capabilities**

Programming Languages: TypeScript, JavaScript, Python, MATLAB, Dart, Java, Kotlin, C.
Frontend Frameworks: ReactJS (React Native, React DOM), NextJS, Svelte, SvelteKit, Flutter.
Full-Stack Libraries: Jotai, Immer, TanStack Query, ExpressJS, tRPC, SocketIO, Tailwind CSS, Pyodide.
Testing, Deployment: Vitest, Pytest, Cypress, GitHub Actions, Docker, Google Cloud Platform, Azure.
Database Management: Prisma, SQLAlchemy, Mongoose, SQLite, PostgreSQL, MongoDB.
Data Science: Tensorflow, Numpy, Pandas, MATLAB, KNIME.

Nov 2023 - Present

Feb 2020 - Nov 2024