Elsa Tsia

+61 414810390 | ejj_t@outlook.com | linkedin.com/in/elsa-tsia | elsa-tsia-portfolio.netlify.app | Sydney, NSW

PERSONAL STATEMENT

Computer Science professional with a passion for full-stack development and AI. Experienced in leading projects and developing MERN stack applications, with ongoing side gigs building AI agents, workflows, and full-stack websites including Shopify and WordPress platforms. Proven ability to quickly learn new technologies and deliver innovative solutions. Eager to contribute technical expertise and project management skills in a professional software development role.

EDUCATION

Monash University   Clayton, VIC, Australia
Bachelor of Computer Science; Monash Fencing Club   *Jul. 2023 – Jun. 2025*

University of Utah   Salt Lake City, UT, USA
Bachelor of Science in Computer Science   *Jan. 2021 – Dec 2022*

Bromsgrove School   Worcestershire, UK
iGCSE/GCSE; national VEX robotics competition; team captain for fencing & U16 table tennis   *Jan. 2017 – Dec 2019*

ISC2 Certified in Cybersecurity (CC)   September 2025

WORK EXPERIENCE

Cybersecurity Associate (Contract)   Feb – Jun 2025
AlphaCloud Pty Ltd   *Melbourne, Australia*

- Supported security initiatives based on NIST/ISO 27001 frameworks, applying principles of risk management and access control to evaluate security controls and infrastructure protection.
- Assisted with creating Visio diagrams to visually map security processes, enhancing team understanding and communication.
- Improved documentation accuracy by proofreading security policies and reports, ensuring clarity and compliance.
- Gained hands-on exposure to offensive and defensive operations, including vulnerability assessment, penetration testing concepts, and incident response methodologies.

IT Intern   Nov 2023 – Feb 2024
TK Elevator   *Sydney, Australia*

- Gained comprehensive insight into corporate IT infrastructure, project management methodologies, and **ITSM** tools including **SAP** and **ServiceNow** through shadowing a Business Analyst.
- Provided L2 Technical Support by troubleshooting, performing software updates, and configuring hardware, while assisting staff with technical issues, enhancing overall workplace tech proficiency.
- Attended weekly HR and IT meetings to discuss milestones and track progress of current projects.
- Renovated the team's project management tracker from Excel to Asana, streamlining workflows and improving project oversight for the IT department.
- Successfully completed a critical data migration project, transferring employee information from SharePoint to Expedo within one month, enhancing HR data management efficiency.

Private Tutor   June 2024 – 2025
Self-Employed   *Vancouver, Canada*

- Tutoring a Grade 9 student in sciences, maths, English and French, enhancing their understanding and academic performance in these subjects.
- Engaged with following soft skills: effective communication, patience, empathy, adaptability, problem solving, organisation, strategic thinking, resilience.

Skills

Languages: Java, C#, MATLAB, Python, SQL, XML, HTML & CSS, C/C++, JavaScript ES6, Typescript, Haskell
Frameworks & Libraries: React, Node.JS (Express), TailwindCSS, HeadlessUI, JUnit, .NET, MAUI.NET, Angular, Spring Boot, OpenMP, OpenMPI
Databases: Oracle DMBS, MongoDB Atlas, MySQL, PSQL
Developer Tools: GitHub, GitLab, VS Code, Visual Studio, IntelliJ, Eclipse, Figma, Wireshark, AWS, Netlify, Render, Docker, Cursor
Expertise: Full-Stack Dev, Project Management, OOP, Advanced Data Structures & Algorithms, Databases, Functional Reactive Programming, Networking, Parallel Computing, Image Processing, Computer Vision, Excel
Spoken Languages: English, French, German, Mandarin, Cantonese
Fencing: Monash Fencing Club - UniSport 2023: 3x bronze medalist for team, 1x gold Epee medalist; U14–U18 West Midlands representative for Epee and Foil; Hereford & Worcester County Champion U16 & U18

Projects

Lotion | *Swift, Xcode*   Sep. 2025
- iOS mobile app for advanced productivity tracking. Features include smart lists with dynamic filtering, time blocking with calendar integration, quick task capture via Siri shortcuts, collaborative shared workspaces, and an analytics dashboard for personal insights. Additional functionalities include mood and energy tracking, a Pomodoro focus timer with ambient sounds, location-based reminders, and voice note recording with transcription.

Zahara | *MongoDB Atlas, Express.js, React, Node.js, Stripe*   Sep. 2025
- A full-stack e-commerce application for a high-end modest activewear brand. The app features a responsive and elegant user interface built with React and styled using Tailwind CSS, reflecting a minimalist, luxury aesthetic. The backend is a robust RESTful API built with Node.js and Express, which connects to a MongoDB database to manage product, user, and order data. The application includes core e-commerce functionality, such as a product showcase, a shopping cart, and a checkout system, with secure payment processing handled by Stripe.

UniFlow | *MongoDB Atlas, React, Node.js (Express), Docker, AWS EBS, Netlify*   Jul 2024 – June 2025
- Led a team as **Project Manager** for a Capstone project, employing **Agile** scrum methodology to develop a client-facing task management software for university group assessments.
- Established and maintained **CI/CD** pipelines using **GitHub Actions**, automating build, test, and deployment processes for the full-stack web application.
- Implemented **user authentication** with secure **JWT-based access**, ensuring data protection.
- The software includes features such as task assignment, tracking, task collaboration, Calendar and Gantt chart view.

Databases | *SQL*   Jan. – Feb. 2024
- Used SQL to implement a small database in the **Oracle RDBMS** for Monash Art Gallery and carried out DML commands and make specified changes to the database structure.
- **SQL** and **NoSQL** to write queries to produce specified output and use **PL/SQL** to enforce business rules. Also used **MongoDB** to write non-relational queries.

Convolutional Neural Network (CNN) | *MATLAB*   May – Jun. 2023
- Used MATLAB's **Deep Learning Toolbox** to build **CNNs** from scratch for two tasks using Oxford's Flower Dataset.

Finding Plants | *MATLAB*   Mar. – Apr. 2023
- Using **image processing** techniques, I designed and implemented a program to output a binary image marking regions corresponding to plant material.

Snake Game | *C#*   Oct. – Dec. 2022
- Applied the **MVC** design with event handling to create a user-friendly GUI using **MAUI**.
- Additionally, built a networked software system using the client-server concept and advanced networking APIs and protocols including TCP and IPv4.
- Implemented an API to store game data using SQL.

Spreadsheet | *C#*   Aug. – Oct. 2022
- Designed and developed a complex Spreadsheet software using concurrent programming and modern software development tools.