



CATHERINE MAI_

COMPUTER SCIENCE /
MEDIA ARTS STUDENT

/ ABOUT ME

I love solving puzzles and creating things. That's why I'm a Computer Science / Media Arts student, with interests in software engineering, UI/UX design, and cybersecurity.

I want to develop technical and professional skills through practical experience in industry projects in a nurturing workplace.

/ SKILLS

>> Software development

- Programming
 - Python, Java, C, Perl, Bash/Shell
- Front-end development
 - JavaScript, React, HTML/CSS
- UI / UX design

>> Security engineering

- Digital forensics
- Binary exploitation
- Reverse engineering
- Web application testing
 - Recon, auth, XSS, SQLi, LFI, SSRF

>> Collaboration and leadership

/ CONTACT

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/ WORK EXPERIENCE

>> MOBILE FRONT-END DEVELOPER

CircEx | 2022

- Coded interfaces for a **React Native mobile app** that provided an e-commerce platform to op-shops, based on wireframes
- Implemented **3 features that improved the UX** of the app by streamlining the product listing and order confirmation processes

>> WEB FRONT-END DEVELOPER & UI / UX DESIGNER

Cyber Checkup | 2020

- Designed the **UI & UX of a desktop web app** for a cybersecurity education project led by my Professor, Richard Buckland
- Coded my **front-end designs** in JavaScript, HTML, and CSS
- Collaborated with a **multidisciplinary team** to determine project requirements, revise designs and integrate the front and back ends

>> HEAD TEACHER / TEACHING ASSISTANT

Code Camp | 2018 - 2022

- **Managed classes** of up to 25 students from 4-13 years old
- **Delivered programming lessons** on creating video games
- **Provided one-on-one teaching support** to students

>> THEATRICAL DESIGNER, TECHNICIAN AND PERFORMER

Various theatrical productions | 2018 - Current

- Collaborated with a **diverse range of theatre-makers** to deliver 22 productions working across technical, creative and performance roles
- **Designed and implemented the theatrical lighting** for 12 productions
- **Co-directed the technical development and installation** of a large-scale show, consisting of lighting, sound, and staging requirements
- **Other roles** have included sound & vision (6 shows), stage department (3 shows), performer (5 shows), and creative developer (4 shows)

/ EDUCATION

>> UNIVERSITY OF NEW SOUTH WALES

B. Computer Science (Security Engineering) / Media Arts | 2025

- **COMP6445 | Digital Forensics | Distinction**
 - Analysed digital evidence using computer forensics tools
 - Conducted 2 major investigations, detailing my process and findings in comprehensive digital forensics reports
 - Engaged in weekly discussions on ethics and professionalism
- **COMP3511 | Human Computer Interaction | Distinction**
 - Collaborated with 4 team members to design a new app's UI / UX from scratch to high-fidelity prototypes in Figma
 - Conducted research interviews and usability tests with users
- **COMP2041 | Software Construction | Credit**
 - Wrote a Shell-to-Perl compiler and basic Git implementation
 - Solved text data processing problems using Bash, Perl, regex and command line functions
- **Delegate to BSides Canberra 2021**
 - Networked with industry professionals to learn about working in the cybersecurity industry, and participated in the CTF

