



# 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. I'm interested in software engineering, UI/UX design, and cybersecurity.

## / TECHNICAL SKILLS

### SOFTWARE ENGINEERING

#### Back-end development

- Java, Python, C, Perl, Bash / Shell

#### Front-end development

- React / React Native, JavaScript, HTML, CSS

#### UI / UX design

- Figma

### SECURITY ENGINEERING

#### Digital forensics

- Autopsy, Volatility, Wireshark

#### Web application testing

- Auth, XSS, SQLi, LFI, SSRF

#### Binary exploitation & reverse engineering

- IDA, pwntools, pwndbg

## / EDUCATION

### UNIVERSITY OF NEW SOUTH WALES

B. Computer Science / Media Arts  
(Security Engineering) | Grad: 2024

## / CONTACT

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G: github.com/stickpenguin

## / WORK EXPERIENCE

### AUDIOVISUAL TECHNICIAN & EVENT SUPERVISOR

UNSW Venues & Events • 2023 - Current

- Coordinated with clients to deliver **28 events** to their specifications
- Actualised audiovisual, lighting, and staging requirements of shows and conferences in cooperation with in-house and client technicians
- Supervised the running of events, resolving issues promptly and communicatively to ensure smooth delivery and client satisfaction

### THEATRICAL LIGHTING DESIGNER, TECHNICIAN & CREATIVE

Freelance • 2017 - Current

- Collaborated with a diverse range of theatre-makers to deliver **26 productions** working across technical, creative, and performance roles
- Designed and implemented the **theatrical lighting** for 15 productions
- Co-directed the technical development and installation of a **large-scale show**, consisting of lighting, sound, and staging requirements
- **Creative roles** have included performer, music arranger, and costumer

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

SECedu • 2020

- Designed the UI / UX of a **desktop web app** for a cybersecurity project led by Professor Richard Buckland which was pilot tested by 50 users
- Implemented 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

## / PROJECTS

### TABLETOP MEETUP UI / UX • Figma • React Native • Front-end

- Designed the UI / UX of an **original mobile app from scratch** that facilitated gaming meetups, in collaboration with 4 team members
- Developed **iterative prototypes** using Figma and React Native
- Conducted **comprehensive research interviews and usability tests** with gaming industry professionals and targeted user groups

### CIRCEX React Native • Front-end • Mobile • UI / UX

- Implemented interfaces for a **React Native mobile app** that provided an e-commerce platform to op-shops, based on wireframes
- Implemented **3 features that streamlined the UX** by overhauling the flows of the ordering and product listing processes, reducing loading times, and improving the feedback provided to users

### PERSONAL WEBSITE HTML • CSS • Front-end • Desktop

- Designed and implemented a **responsive website** showcasing a selection of my projects using HTML and CSS

## / EXTRACURRICULAR

### BSIDES CANBERRA CYBERSECURITY CONFERENCE 2021

- Attended with the **UNSW Security Society** and networked with **industry professionals** to learn about working in cybersecurity

### UNSW SECURITY SOCIETY

- Competed in **CTFs** and attended **workshops** on cybersecurity topics

