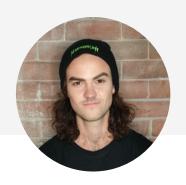
# LUKE TURNER

SOFTWARE ENGINEER& VIRTUAL REALITY RESEARCHER





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Sydney, Australia

<u>LinkedIn</u>

### **PROFILE**

I am hard-working, creative, and autonomous software engineer and Virtual Reality researcher. My fascination lies at the intersection of physiological sensing and Virtual Reality for understanding, augmenting and remedying various aspects of the human experience.

## SKILLS

- Unity (C#) Game Development
- Meta XR SDK Development (Quest 2/3)
- WebXR
- Normcore (Networked VR)
- Excellent research and written communication skills
- ReactJS / TypeScript
- Git / Github
- Testing (Jest, Cypress)

# EDUCATION

# PHD CANDIDATE IN COMPUTING SCIENCE

University of Technology Sydney August 2023 - Present

### DIPLOMA OF INFORMATION TECHNOLOGY (FULL STACK WEB DEVELOPMENT)

Coder Academy Sydney

Feb - Aug 2019

### EXPERIENCE

#### PHD CANDIDATE, VR LEARNING SYSTEMS

University of Technology Sydney

August 2023 - Present

- Research project involves investigation into integrating physiological computing with Virtual Reality in the domain of optimal learning and skills training protocols.
- Developing a prototype that uses a closed-loop cognitive-load measure to individualise learning paradigms for a wide variety of users.

#### **VR SOFTWARE ENGINEER**

EyeJack

April 2024 - Present

- Lead developer on the Dream Machine VR project, an immersive, multiplayer music / art performance piece orchestrated by Nona Hendryx (https://www.dreammachinexr.com).
- Handled the design, development and testing of a Unity WebXR application featuring multiplayer support, graphically intensive animations and immersive audio experiences.

# BACHELOR OF MUSIC AND SOUND DESIGN

University of Technology Sydney

2015 - 2018

#### SENIOR VR DEVELOPER

uCat

November 2022 - Present

- Worked to develop a working prototype of a Brain-Computer-Interface (BCI) pipeline and associated VR app for neural speech processing in locked-in patients (https://ucat.app).
- Fast paced startup culture, working closely with invasive braincomputer interface research organisations and laboratories

#### **FULLSTACK DEVELOPER**

Engineroom

June 2022 - July 2023

- Used VueJS, PHP and Laravel to build and maintain a variety of frontend and backend components of the Engineroom business intelligence / mar-tech platform
- Worked closely with a small team to deliver new features directly to stakeholders through internal communications
- Contributed to company culture through creation of lighting talks initiative

#### FRONT END / GAME DEVELOPER

Deepend

Nov 2021 - June 2022

- Used various front end technologies, mainly React, Typescript and Vue, to create responsive web applications for clients such as Reachout, Coleman Grieg and Essential Energy
- Used Unity (C#) to develop an internal mobile game (Sound Storm) for children with spatial processing disorder (SPD)
- Worked autonomously in a fast-paced Agile environment to deliver to tight deadlines

#### **FULLSTACK DEVELOPER (CONTRACT)**

**XPO Brands** 

Feb 2021 - May 2021

- Over a 3 month contract, used ReactJS to create a responsive web application for Sample Lab (https://samplelab.com.au), a vending machine that dispenses free samples for consumers
- Used NodeJS to create the backend (API layer, security) for the web application
- Used cloud functions (AWS) to send email and SMS confirmations to users