

Emmet Murray

e.minor.murray@gmail.com

as of July 16, 2019

Work Experience

Data61 - Research assistant

May 2019 - Present

- Proof engineering for [Cogent](#), a systems-oriented programming language that facilitates formal verification of systems software
- Assisted in reducing proof build time by over **90%**, from **13 hours** to **1.5 hours**

Microsoft - Software Engineering Intern

November 2018 - February 2019

- Intern in the Business Applications Group working on the [Power Platform Admin Center](#).
- Built customer facing and accessible frontend experiences using React, TypeScript and Redux
- Built MVC modelled backend services in C# to support frontend experiences
- Worked with designers, managers, other developers and product managers to build production software

Literatu - Automation and Web Development

August 2016 - September 2019

- Independently researching and developing automated solutions for web scraping projects involving large datasets of over **15,000 files**

UNSW - Casual Academic - Tutoring

February 2018 - May 2019

- Tutored COMP1911, COMP1521, COMP2511, SENG2021 and SENG3011.

Education

University of New South Wales - Bachelor of Engineering, Software (Honours)

February 2016 - December 2019

- Honours Thesis in programming language research and formal verification
- Active member of UNSW Taiko club and UNSW CSESoc

Etelä Tapiolan Lukio, Finland - Rotary Youth Exchange

January 2015 - January 2016

- Acquired conversational proficiency in Finnish in under a year of study
- Studied English Literature, Spanish, German, Mathematics, Physics, Finnish and Music in Finnish

Volunteering

The UNSW Tea & Coffee Society - Vice-President (previously President, Secretary)

August 2016 - November 2018

- Coordinating and organising various events for a society with over 500 members
- Led the logistics and organisation of a high tea outing for the society at QVB tea room, a successful event with over 100 guests

Side Projects

<https://emmet.coffee>

<https://github.com/emmet-m/>

Awards & Commendations

[The Macquarie SENG2021 Award \(2017\)](#)

[UNSW Engineering Dean's List \(2017\)](#)

[Finnish National Certificate Of Language Proficiency \(2015\)](#)

[Surf Life Saving Australia Bronze Medallion \(2011\)](#)

Technical Skillset

C, Java, C# and C++ program development

Web development (Javascript, Typescript, React, Redux, Node.js, Flask, Apache)

Functional Programming (Haskell, SML)

Theorem Proving & Verification (Isabelle, Dafny)

Scripting (Perl, Python, UNIX Bash, PowerShell)

Version control (Git)

L^AT_EX

Hobbies

Martial Arts

Cooking

Listening to and playing music

Learning languages

Languages

English (Native)

Finnish (Conversational)

Mandarin (Beginner)