# **Joel Smith**

+61 430 508 647 | contact@joelsmithdev.com | Sydney, Australia (Willing to relocate) joelsmithdev.com | github.com/joelsmith2226 | www.linkedin.com/in/joel-smith-31b54690/

## **Summary**

- ❖ Final year Computer Science/Electrical Engineering student at UNSW in Sydney
- Experience with various general purpose languages (Python, Java, C etc.), deep learning, big data, frontend and backend web development, Swift iOS
- Learnt teamwork and adhered to best software engineering practices in large development team at Westpac and iOS start up Coffee Better
- Honed communication and leadership skills as a tutor at university and as private HSC tutor

## **Work Experience**

Computer Network Tutor at UNSW

Jan 2019 - Present

❖ Tutored UNSW Computer Networks course covering computer network theory (all 5 layers, TCP/UDP, CDNs, P2P etc.) and socket programming

Dec 2018 - Feb 2019

iOS Developer at Coffee Better

Contributed to <u>Coffee Better's iOS app</u>, developed in Swift using Google Firebase for data collecting/storage

Data Engineer at Westpac

Jul 2018 - Dec 2018

- Completed UNSW Co-op Internship in the Data Driven Experiences Platform (DDEP)
- Worked in a large development team working on the Python framework for ingesting data
- ❖ Added an inbound JSON feature to ingest large JSON datasets into the Hadoop cluster with preprocessing, schema validation and Hive table
- ❖ Wrote unit tests, increasing code coverage from approximately 60% to 70% (100+ tests)

Enterprise Architect & IT Ops Engineer at QBE Insurance

Jul 2017 - Feb 2018

- Completed UNSW Co-op Internship working in several teams, mainly architecture and IT operations
- Created high-level architectural solutions to business problems, such as email deliverability service
- Supported transition from siloed IT asset databases towards more robust CMDB using VBA automation

Private Academic and Music Tutor

Jan 2015 - Present

Operated as a self-employed private high school tutor in various academic subjects and musical instruments (HSC Mathematics, Science, Brass, Piano, Guitar)

#### Relevant Projects

- Groovin' The View Music visualizer utilising DSP principles developed in JavaScript using P5
- Todoish Organisation tool for managing projects and accomplishing tasks, built using ReactJS and Firebase
- Invading Space Space invaders artificial intelligence clone constructed in JavaScript using P5
- ❖ Portfolio Website Website to showcase projects and resume in HTML/CSS and JS

#### Education

B. Electrical Engineering (Honours)/B. Computer Science, University of New South Wales

2015 - 2020

- **\*** WAM 74.8/100
- Two Co-op Scholar Internships
- Honours Thesis 'Qualitative Assessment Metrics For Transfer Learning' (83 Distinction)

Higher School Certificate, Fort Street High School (97.45 ATAR)

2009 - 2014

## **Technical Skills**

- Python, C, Java, JavaScript, Matlab, Perl, Haskell, HTML/CSS, Swift, Git, ReactJS, XCode, Keras, OpenGL, PyTorch, TensorFlow, postgreSQL
- Completed courses on data structures, object-oriented programming, databases, algorithms, artificial intelligence, operating systems (OS161), functional programming, networks, graphics, neural networks
- Studied electronics, digital signal processing, control systems, electromagnetics, RF electronics, real-time systems and electrical engineering design

## **Awards and Qualifications**

- UNSW Dean's Honours List, 2015 2017
- UNSW Computing Leadership Award, 2015
- Fort Street Principal's Prize Leadership
- ❖ Nominated for 2014 HSC Encore for Musical Composition

## Volunteer Experience and Extra-curricular Activities

- ❖ Project Officer/IT Officer for Fortunate Food Co. in UNSW Enactus, 2018
- ❖ UNSW CREATE club member, 2015 present
- ❖ World's Greatest Shave Participant (raised 1.6k), March 2018
- Fort Street High School SRC, 2009 2013
- Member of NSW Arts Unit Ensembles (toured internationally), 2009-2014

#### Referees

Available upon request