# Patrick Brett

## SOFTWARE ENGINEERING STUDENT | UNDERGRADUATE SOFTWARE ENGINEER



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# **Profile**

Penultimate year software engineering student at Monash University, with a 3.9/4.0 GPA and a variety of industry experience.

Strong working knowledge of front end, back end and DevOps tools including Node, React, containers and AWS. I especially love all things cloud, and have achieved 10 AWS certifications, including both of the flagship Professional level certs.

On top of being a full time student, I am currently a part time software engineer at ANZ, where I work on the Property Price Predictions team building a cloud-native, machine-learning powered price prediction platform for houses and units.

## Education



Bachelor of Engineering (Honours) & Bachelor of Commerce Started February 2018. Graduating November 2022.

Double major in Software Engineering and Finance.

GPA: 3.9/4.0, WAM: 87/100

### **Academic**

- HD 98/100 Software Architecture
- HD 96/100 Discrete Mathematics
- HD 96/100 Computing for Engineers
- HD 88/100 Computer Architecture (highest in cohort)
- HD 86/100 Algorithms and Data Structures

### **Other**

- Engineering Dean's Honours List
- Engineering Leadership Program
- Monash ICPC (Competitive Programming)
- Monash Association of Debaters
- Featured on 'Meet our Students' page



VCE, McKinnon Secondary College, VIC Class of 2017

- 99.80/99.95 ATAR
- Subject dux in Chemistry (49/50), Specialist Maths (48/50)
- Ranked 2nd Australia-wide in computer science challenge

# Experience



Docklands, VIC July 2020 - Present

Undergraduate Software Engineer (previously IBL Intern)

- Built end-to-end a new computer vision model and surrounding API to identify features of relevance in property images, reducing missing property feature data by 37%.
- Re-architected a significant proportion of the data ingestion pipeline, making use of cloud-native services to process data 5x faster.
- Received a near-perfect mark (99.5%) for the end-of-placement evaluation.
- Accepted an ongoing place as an undergraduate engineer.

# Nationality

Australian citizen

Links

**Github** 

LinkedIn

YouTube channel

# **Certifications**













August 2018 - December 2019

# Student Software Engineer

- Started as an intern and was quickly offered a part time role.
- Built mobile apps for sales team, helping to land contracts with McDonald's Australia and Dunkin' Donuts.
- Optimised QA processes leading to 25% reduction in manual QA time.



Private tutor

February 2015 - November 2019

Mathematics and Science Tutor

- Spent more than 1000 hours helping over a dozen students improve their understanding of mathematics and science, as well as study habits and enjoyment of STEM.
- Advertising my business, organising my schedule and setting my rate was a great crash-course in entrepreneurship.

# **Projects**



📕 Livebook

Online platform for authors to upload and share their work, with a clean and pleasant reading experience.

I led the team of 3 developers.

Accepted into Monash Validator in 2020.

TypeScript | GraphOL | Postgres | AWS | Redis | React



Al that detects number plates in images and then blurs

Built to prevent number plate fraud.

#### **Github**

Angular | Go | SageMaker | Python | Lambda



/// Match the Cloud

Matching game - match AWS service names to their icons. Surprisingly tricky!

I built this to learn a new front-end framework.

#### Github | Live demo

VueJS | NuxtJS

# **Activities and Leadership**



JuniorDev

Speaker

July 2020

I presented a talk on building serverless applications using AWS Lambda and the Serverless Framework to a livestream audience of ~50 people. This included a fun, live, interactive demo where audience members could witness a serverless application in action.

## Link to a recording of the presentation



YouTube

**Content Creator** 

September 2020 - Present

Producing videos for a community of over 10,000 unique viewers, helping students and IT professionals alike to learn about the cloud and achieve AWS certifications in the process.

I absolutely love receiving feedback that I have helped people accelerate their careers and improve their skills.

#### Link to the channel



Scouts Victoria

Youth Leader

August 2014 - August 2018

I spent several years heavily involved in the Scouts movement, including four years as a Youth Leader for Cubs (7-11 years old). This involved organising and running camps and activities multiple times a month.

**JavaScript** 

Python

**AWS** 

CI/CD, Docker, DevOps

Algorithms & data structures

React

Java & Spring Boot

UI/UX design

iOS development (Swift)

Android development (Java)

#### **Hobbies**

I am a highly sociable and active person. I love playing basketball, hiking and mountain biking in my spare time.

I am also a self taught guitarist and pianist, and have completed classical piano exams up to AMEB Grade 5.