

HAMISH BULTITUDE

Sydney, Australia · hamishgrahambultitude@gmail.com · 0432832796 · <https://github.com/hami-sh>

WORK EXPERIENCE

Canva

Senior Software Engineer - Media Platform

Software Engineer - Ecosystem

Sydney, Australia

2024 - Now

2021 - 2024

Currently, I own and operate Media Service, Canva's central media processing system that handles hundreds of thousands of requests per second and manages petabytes of data. I also lead development of the Annotation Service, which powers all of Canva's AI features and research by managing our machine learning data at massive scale with sub millisecond performance. Both services are critical infrastructure backing all of Canva's AI efforts.

Previously, I launched Canva's Public REST API and implemented our in-house OAuth 2.1 system. A highlight project was CanvaGPT – a ChatGPT app announced at OpenAI DevDay by Sam Altman. It became the 1 most used GPT at launch, serving millions of users and driving significant user acquisition. I was selected to represent Canva at GitHub Universe in San Francisco and spent time visiting the OpenAI office to collaborate on future work.

Key achievements include:

- Scaled Media Service to handle hundreds of thousands of QPS
- Personally developed Canva features that closed the two largest enterprise customers to date and led to direct revenue growth in the millions of dollars
- Built Annotation Service supporting all of Canva's AI initiatives at scale
- Implemented OAuth 2.1 spec as a top-level microservice
- Developed bulk operations platform for images and design creation
- Created webhook notification system for design activities
- Wrapped core Canva features as APIs including:
 - Generative AI design creation
 - Document import pipeline
 - ML-powered design resizing
- Led 100k user microservice migration
- Developed Slack and Microsoft Teams integrations

Technologies: Java, Typescript, AWS, distributed systems. Maintained 24/7 on-call responsibilities with exceeded expectations performance reviews.

Trybe

Founding Engineer & CTO

Sydney, Australia

2024

Led end-to-end development of a two-sided marketplace for barbers, successfully launching on the Apple App Store. As sole engineer, architected and implemented the entire technical stack, achieving an efficient and scalable booking platform.

User App Store Listing · Barber App Store Listing

Key achievements:

- Developed two native mobile applications in Flutter: a consumer app for finding and booking barbers, and a business app for barber appointment management
- Built real-time location-based discovery system with dynamic map interface for finding nearby barbers
- Implemented secure payment processing system with escrow functionality and automated payout pipeline
- Created real-time notification and direct messaging system for client-barber communication
- Designed comprehensive booking system handling scheduling, cancellations, and availability management
- Integrated analytics dashboard for barbers to track business metrics and booking patterns
- Built admin panel for user management, dispute resolution, and platform oversight

Technologies: Flutter, Postgres, Firebase, Supabase, AWS, Google Cloud Platform, Stripe, Geospatial Indexing

International Journal of Legal Forensic Medicine

Author

<https://doi.org/10.1007/s00414-022-02871-5>

International

Aug 2022

University of Queensland

Research Engineer

Brisbane, Australia

Feb 2020 - Dec 2021

My work at the University of Queensland focused on leading design and development of the first ever robotics system to perform automated Craniofacial Superimpositioning – the process of identifying missing persons by superimposing a photo of the victim with a given skull. Work was done in C++ and Python, of which culminated in me becoming a published author in the International Journal of Legal Forensic Medicine. These days, some of my spare time is taken up working on my next article on the topic.

EDUCATION

University of Queensland *GPA: 6.8125/7.0*
Bachelor of Computer Science and Bachelor of Biomedical Science

Brisbane, Queensland
Jan 2018 - Dec 2021

VOLUNTEERING

Google Developer Student Club Lead

2020 – University of Queensland Chapter

Lead technical workshops and educational sessions for university students, including organizing guest speakers from Google to present Go programming language tutorials. Developed and presented an original introductory Unix workshop. Collaborated with UQ Computing Society to coordinate joint technical events and programming workshops.

SKILLS & INTERESTS

Java, Python, TypeScript, Bazel, React, Next.js, Microservices, AWS, Postgres, MySQL, Vector Embeddings, Mentoring
Surfing, Retro Video Game Emulators, Medicine

PROJECTS

Dialtone *TypeScript, Next.js, React*
Stealth project.

Uproot *React, Go*

Worked for the Brisbane City Council to develop a solution for farmers to identify and report invasive plant species using an in-house image recognition model. Was offered VC funding to continue work.

CompareTheBrew *Python, React*

Search engine which empowered users to search for the most efficient drinks from various alcohol stores based on the formula *standard drinks/price*. The website resulted in my parent's IP address being permanently banned from accessing BWS. For similar reasons that legally I cannot put in writing, we had to discontinue the site.

AWARDS

Canva Media Platform MVP

Recognises an employee every quarter that has gone above and beyond in their work.

Canva
Dec 2024

Canva Ecosystem MVP

Recognises an employee every quarter that has gone above and beyond in their work.

Canva
Jan 2024

Best Software Project - 2021

Recognises the best student led project at the University of Queensland for a given year. This was for Uproot mentioned above. Was offered VC funding to continue on as a proper startup. Declined due to moving to Sydney.

ITEE University of Queensland

Dean's Commendation

Awarded for a semester GPA of higher than 6.75.

University of Queensland
Aug 2018, Dec 2018, Aug 2019, Dec 2019

Ryan Federal Member's Young Leaders Award

"Recognises a stand-out young person who is shaping the future direction of our industry"

Federal Member for Ryan
Nov 2017

REFERENCES ON REQUEST