Angus Johnson

angussbjohnson@gmail.com
angussbj.github.io

Angus is a full-stack software engineer and team lead with a strong background in mathematics. He is excited about solving problems, learning new things, and making a difference in the world.

Technologies: Typescript, Kotlin, Java, Python, React, React Native, GraphQL, SQL, Postgres, Micronaut, Knex.js, Objection.js, PySpark, CSS, AWS, Serverless, DynamoDB, Redshift, Three.js

Employment

Ailo

Principal Engineering Team Lead (Jan 2024 – present)
Engineering Team Lead (Mar 2021 – Jan 2024)
Software Engineer (Mar 2020 – Mar 2021)
Junior Software Engineer (Sep 2019 – Mar 2020)

Ailo is a 100 employee, 35 engineer start-up, building a multi-sided property management payments platform.

- Architected and led development of a microservice-based accounting and payments system
  - multiple delivery teams, high scalability requirements, several sets of regulations, and a wide variety of payment flows and accounting strategies to support
  - new features unblocked doubling our client count from 40 companies to 80 in 3 months
- Mentored mid-level and senior engineers, and helped a new team lead learn to lead.
- Developed the domain model for the expansion from a single-sided platform to a multi-sided platform. Awarded employee of the month for this work. That domain model has been underpinning the platform and guiding development for over four years.
- Took over as team lead two weeks before an important deadline while the team was behind schedule. Enabled the team to meet the deadline, then worked with the team to fix tech debt and shift the culture to avoid future crunches. Awarded employee of the month for this work.
- Designed and delivered countless full stack features.

Bachelor of Science (Honours) (Advanced Mathematics)

First Class Honours with thesis in Categorical Representation Theory. University of Sydney (2014 – 19)
Double major: Pure Mathematics and Applied Mathematics
Weighted average mark: High Distinction

Projects

Befunge playground

Engineer, Designer – Solo Project (Nov 2021)

A grid-based IDE for the esoteric programming language Befunge with debugging, visualised execution, and purpose-build editor actions (e.g. paste with reflection/rotation). *"The grid editor is a godsend."*

mchess.io

Lead Engineer, Designer (Aug 2020 – Mar 2021)

A chess variant engine and web app allowing user-defined combinations of rules and geometries – 3 person team.

- Taught Typescript, React, and agile processes to two recent university graduates who had not coded much before. They are now both highly competent senior software engineers.
- Learned AWS Lambdas, DynamoDB, and API Gateway to build a serverless backend.

[2D ODE Grapher](#)   Engineer, Designer – Solo Project (2018)

An Android app to visualise systems of ordinary differential equations and their solutions. It has 4.2 stars with 20 reviews on the Google Play Store. *"Best differential equation plotter out there."*

Star Finder   Summer research scholarship, USyd Physics (2015)

A Java program that identifies and performs preliminary analyses of γ-Doradus pulsating stars from their emission spectra. This replaced a manual process, saving 40 person-hours of time per dataset.

References

Contact details available upon request

"It was a class act how you picked up that meeting in [Senior Product Manager]'s absence and just ran it. Amazing leadership. And you also did a great job of it too."

- Ailo co-founder and CEO

"[Angus] has shown great ability to create connected, achievable and concrete goals for multiple teams as part of a large initiative."

- Head of Engineering

"It's amazing how well you organise work around Discovery, Implementation as well as Support. You consistently exceed my expectation on the quality of an investigation or research."

- Lead Engineer

"I enjoy working with Angus. He's super reliable, always goes above and beyond in everything he does, a clear thinker"

- Product Manager

Other Employment

Angus has also worked teaching maths (University of Sydney Tutor 2019 – 2020, and privately 2014 – 2019); teaching circus skills to classes of adults and children (various companies 2010 – present); performing aerial circus skills; rigging, stage-managing, and acting as safety officer for circus companies; and teaching and performing baroque music (2013 – 2014, 2016).