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, helping people grow, and making a difference in the world.

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

Employment

Ailo

Engineering team lead (Mar 2021 – present) Software Engineer (Mar 2020 – Mar 2021) Junior Software Engineer (Sep 2019 – Mar 2020)

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

- Designed and led the development of a microservice-based accounting system that coordinates
 and provides a unified view of transactions and liabilities, across vastly different accounting and
 transaction patterns, satisfying several sets of regulations and high scalability requirements. This
 included coordinating the migration of some functionality from a predecessor system while
 avoiding downtime for customers.
- Mentored mid-level and senior engineers, including helping a new team lead grow into their role.
- 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 two years.
- Took over as team lead while the team was two weeks from a very important deadline and running behind schedule. His decisions and efforts allowed the team to meet the deadline, after which he worked with the team to clean up the tech debt and shift the culture to avoid future crunches. Awarded employee of the month for this work.
- Designed and delivered countless front-end user flows, full stack features, and backend accounting and transactions processes.

Projects and Education

Befunge playground

Engineer, Designer - Solo Project (Nov 2021)

A simple grid-based IDE for the esoteric programming language Befunge with debugging, visualised execution, and editor functionality (including paste with reflection/rotation). Written in React. <u>"The grid editor is a godsend."</u>

mchess.io

Lead Engineer, Designer (Aug 2020 – Mar 2021)

A chess variant engine and web app allowing user-defined combinations of rules – 4 person team.

- Set up a robust and scalable react native app that has been easy to grow and develop.
- Taught Typescript, React, and agile processes to two recent university graduates who had not used them before. They are now both confident, comfortable, and good at adding new readable and maintainable front end and game logic features.
- Taught himself 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 approx. 40 hours of time per dataset.

BSc (Hons) (Advanced Mathematics)

University of Sydney (2014 – 19)

First Class Honours in Pure Mathematics. Thesis in Categorical Representation Theory. Semester average marks chronologically: 91, 91, 88, 83, 85, 93, 86, 95.

Victorian Certificate of Education ATAR 99.00

Wodonga Senior Secondary College (2012 – 13)

References

Contact details available upon request

"Angus is a true champion and I doubt anyone would say different across the business. I'm proud to be on his team."

- Principal Engineer

"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

"Angus has delivered on feature after feature in the Metapod team. He brings a wealth of great suggestions when working through discovery and delivery."

- Head of Design

"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

"Thanks for teaching me so much over the past month. Really impressed at the depth of your knowledge and your clarity when describing abstract concepts."

- New Engineer

"The quality of comments and links you provide in the Jira ticket is to the highest standard I could see at Ailo."

- Lead Engineer

"Angus did a really good job in the past few months, he grows fast, he can take the lead of a feature and develop quality solutions independently."

- Lead Engineer

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).