

JASPREET SINGH

Senior software engineer · backend & platform · Melbourne, Australia

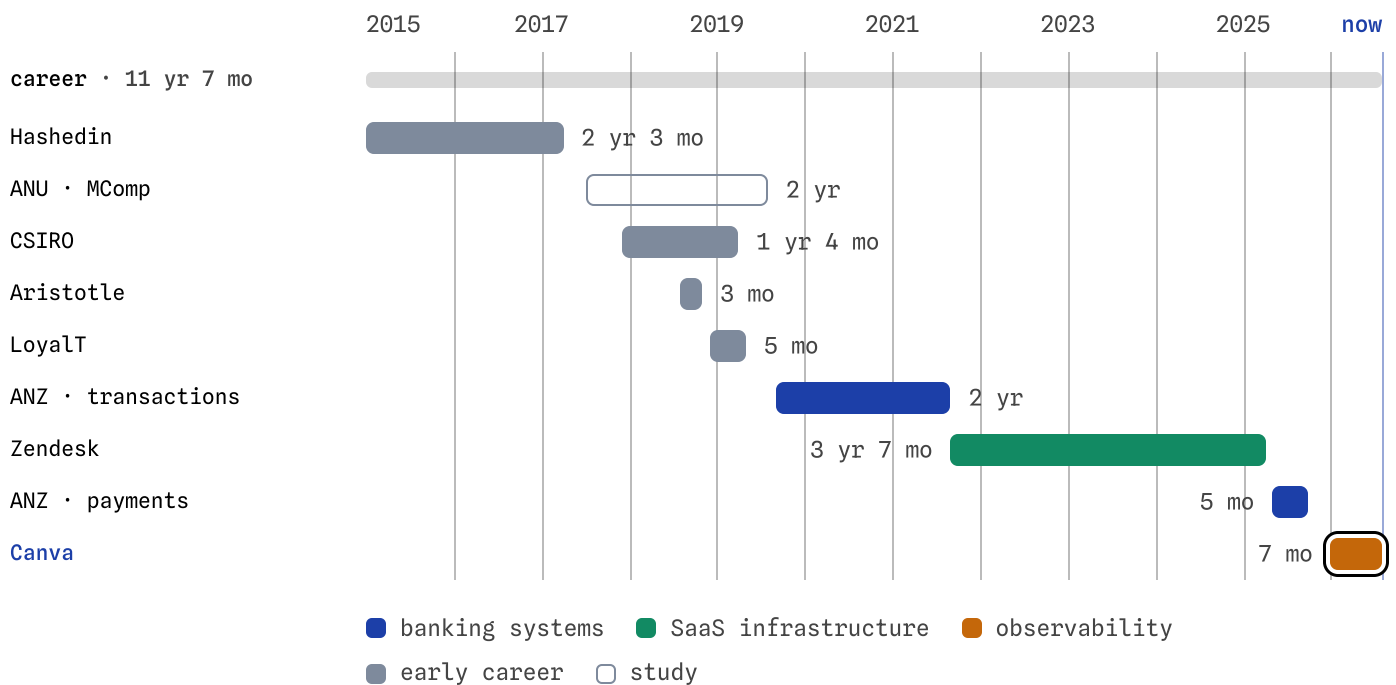
I build the backend systems people never see and can't do without: the ANZ Plus transactions service, designed from the ground up for 3,000+ transactions a second; Zendesk's Express Sandbox, which cut provisioning for the largest customers from over a month to under a week; and the OTel operator and metrics API behind Canva's observability platform.

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EXPERIENCE · 9 SPANS · 2015 → NOW

Eleven years, read as a trace

This is how I read production systems, so here is the career the same way. Span length is real duration, to the month.



Canva Software Engineer · Melbourne

Jan - Jul 2026 · 7 mo

Go · Terraform · jsonnet · TypeScript · React · Java · protobuf · AWS

- Shipped the OTel operator for the Metrics team, managing multiple OpenTelemetry collector instances within a Kubernetes cluster.
- Shipped the metrics API as part of the Observability API, available to every engineer at Canva.

ANZ Bank · payments Senior Software Engineer · Melbourne

May - Sep 2025 · 5 mo

Go · Google Cloud Spanner · GCP · gRPC · protobuf

- Developed and maintained gRPC microservices for the ANZ Plus payment service in Go on Google Cloud Run, deploying to production, owning reliability, and carrying the on-call pager.
- Led the refactor of international-payment validation into multiple APIs: the logic became configurable for any integrating API and lives in one place, so behaviour never diverges between them.
- Worked with stakeholders to gather and validate requirements for updating the fraud-check integration to send international payment details to the external service.
- Improved existing unit tests that weren't asserting the arguments sent to mocked interfaces, and found real bugs in the process.

Zendesk Senior Software Engineer · Melbourne

Sep 2021 - Mar 2025 · 3 yr 7 mo

Go · Python · Flask · Celery · AWS · MySQL + Aurora · Redis

- Architected and led *Express Sandbox*: cloning only essential resources (tickets plus their linked organizations) instead of all production data. It covers 95% of use cases and cut provisioning for data-heavy customers like Shopify from over a month to under a week.
- Led publishing most of Zendesk's public APIs via the *Run in Postman* button, dividing the work into logical steps and mentoring an intern to own the implementation end-to-end within three months.
- Built a proof of concept for versioning Zendesk APIs behind an easy-to-configure Go middleware; a leadership and priority change stopped it before production.
- Owned the sandbox service in production: regular deploys, a fixed on-call schedule, and unit, regression, and integration suites. Every pull request that shipped carried a recorded risk assessment.

ANZ Bank · transactions Software Engineer · Melbourne

Sep 2019 - Sep 2021 · 2 yr

Go · Google Cloud Spanner · GCP · gRPC · protobuf · Cloud Dataflow

- Designed and implemented the transactions service for the ANZ Plus app from the ground up, built to support 3,000+ bank transactions per second from core banking systems.
- Kept the architecture and gRPC APIs tenant-generic (ready for the ANZ Plus app, open banking, and whatever came next), working through the proposals with mobile engineers and product owners.
- Implemented a bi-directional streaming API syncing transactions to mobile: multiple message types multiplexed over a single stream with goroutines, acknowledgements stored so every transaction reaches the app at least once.
- Designed the Spanner schema around interleaved tables and hand-optimised the SQL to take full advantage of Cloud Spanner's performance.
- Instrumented monitoring and tracing with OpenTracing and OpenMetrics (now OpenTelemetry), defined CRDs, and containerised the services for Kubernetes, alongside integration and end-to-end test suites.
- Integrated *Look Who's Charging* to enrich transactions with merchant details, addresses, and coordinates, including their webhook for future merchant updates.

LoyalT Co-founder & Engineer · Canberra

Dec 2018 - Apr 2019 · 5 mo

Python · Django · Postgres · Angular · Ionic

- Co-founded LoyalT, a SaaS platform for small and medium merchants to digitise paper loyalty programs and reward their customers.
- Built the entire backend in Python/Django on Postgres, and the frontend in Angular and Ionic for a cross-platform Android and iOS experience.
- Signed up 10 merchants to test the alpha, running the full product lifecycle from store-owner conversations to MVP and beyond.

Aristotle Metadata Registry Software Developer Intern · Canberra

Aug - Oct 2018 · 3 mo

Python · Django · Celery · Redis

- Redesigned document downloads with asynchronous generation and cached results, reducing latency and eradicating the existing network issues.

CSIRO Casual Software Developer · Canberra

Dec 2017 - Mar 2019 · 1 yr 4 mo

Ember.js · Node.js · Express · Python · PostgreSQL · Docker

- Migrated a legacy Ember.js v1 codebase to v3, automating much of the syntax migration with Python.
- Worked directly with scientists studying germplasm (genetic material for plants) to find the feature gaps in the PlantSTEM platform and build what their experiments needed; fixed long-standing bugs in the legacy system along the way.

Hashedin Technologies Technical Analyst · Bengaluru, India

Jan 2015 - Mar 2017 · 2 yr 3 mo

Python · Django · React · Angular.js · MySQL · AWS

- Delivered six full-stack applications in two years, mostly Python and Django with Angular.js and React, for US clients and multinationals like Honeywell: enterprise exposure from the first year of a career.
- Taught Agile methodologies to new interns alongside peers, as part of Hashedin's training culture.

SKILLS

Toolbox

LANGUAGES & DATA STORES

Go

Python

JavaScript / TypeScript

Postgres

Google Cloud Spanner

Aurora DB / MySQL

APIS & FRAMEWORKS

gRPC / protobuf

REST

Redis

Django

Flask

Celery

SQLAlchemy

sqlc

goose

PLATFORM & TOOLING

Docker

Kubernetes

OpenTelemetry

Datadog

GitHub Actions

Terraform

Cloud Run / Cloud Functions

Artifactory

React (working knowledge)

Unit / integration / regression testing

Git / GitHub

EDUCATION

Education

Australian National University, Canberra

Master of Computing · Jul 2017 - Jul 2019 · GPA 5.7/7

Favourite topics: game theory, and neural networks & deep learning. The CSIRO, Aristotle, and LoyalT spans above all ran alongside this degree.

VIT University, Vellore, India

B.Tech, Computer Science & Engineering · Jul 2011 - Jun 2015 · GPA 7.9/10

Favourite topics: algorithm design & analysis, and embedded systems.

OFF DUTY

Away from the keyboard

Badminton and futsal on court, hiking off it, and a standing preference for places I haven't been yet.

CONTACT

Get in touch

For roles, contract work, or a conversation about backend systems, email works best.

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