

# Ashwanth Fernando

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## Skills

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**Languages:** Java (Primary) → GoLang → Scala → NodeJS → Python → Kotlin

**Databases** MySQL | PostgreSQL | DynamoDB

**CLOUD:** AWS EC2 | Elasticache | SNS | SQS | PubSub | RDS | Dataform | Terraform | Jenkins

**MISCELLANEOUS:** Spring | Protobuf | GoMock | Gorm | JPA | Redis | Zookeeper | Kafka | protobuf | GraphQL | grpc | Temporal

**MANAGEMENT:** Deep focus on execution and efficiency | Relentless pursuit of excellence | Building relationships within and across teams

## Experience

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**Software Engineer**, Packsmith

July 2024 – Nov 2024

- Interfaced with PMs to create design, architecture, coding for distributed reverse logistics.
- Built backend stack across different layers from app, graphql to database in record time - 1 month.
- Built system to mark priority and vip orders from shopify feeds which improved shipping time for priority shipping by 140%.
- Modified and created new workflows in Temporal to optimise shipment flow and mark stages appropriately.

**Principal Consultant**, Atlassian, WEX and Coles

Feb 2022 - Jun 2024

- Contributed to reactive BFF layer for performing many backend transactions for the www.coles.com.au website. Built many services that were highly available and used by customers such as Continuity, Shoppable Recipes and Trolley version upgrades.
- Built back end services in the areas of report generation to speed up and increase consistency of billing cycles and removed billing errors by 14%
- Built load balancer for consistent hashing that can balance between elasticsearch clusters in active-active mode. Increased availability for confluence search by 4% globally.

**Engineering Manager | Staff Engineer**, Canva, Sydney, Australia

Nov 2018 - Jan 2022

- Early stage developer turned manager and built a team of 6 engineers to build the back-end infrastructure for 5 products - Canva Live, Playlist, Talking Presentations, Reactions and Presentation Remote Control. Focus on product ownership, people, project management and a 20% coding responsibility.
- Filed 3 patents on inventions related to the above products.
- Written blogs on Canva's engineering website and gave talks on auto-correct.
- Scaled Canva search from 20M - 80M users through search scalability improvements.

**Senior Staff Engineer**, eBay, San Jose, California

Nov 2018 - Jan 2022

- Built configuration system for search that allowed the business to declare the template for search results without involving engineering. Saved a couple of weeks per change to the template that is injected between search results.
- Built backend services on Scala to service conversations on eBay's chatbot.
- Wrote open source framework called Regressr that was used internally across a few departments to test regressions between v1 and v2.
- Led teams of 6+ engineers on different projects during my time.

**Software Engineer L5 (ICT 5), Apple, Cupertino, California**

SEP 2013 - OCT 2014

- Engineering lead for scale out 99.99% availability elastic load balancer for ultra high scale globally deployed services related to device upgrades and activations.
- Technical lead for a team of 12 engineers, managed project timelines, code reviews, task management and product vision. Helping out from time to time with achieving consensus on design and architecture decisions.

**Staff Software Engineer, Walmart, San Bruno, California**

OCT 2010 - SEP 2013

- Built SEO and Base variant capabilities for Walmart Canada.
- Built deployment capabilities for Walmart's cloud deployment system. Filed 2 patents for innovations in this area.
- Built configuration management framework for different environments for the Walmart application platform.

## Patents

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- Systems and methods for remotely controlling electronic presentations (2021221388, Issued Mar 9, 2023)
- Systems and methods for interactive presentations (US 20230205552, Filed Jun 26, 2021)
- Systems and methods for storing and replaying presentations with video and audio (US 20230205808, Filed May 26, 2021)
- System and method for increasing throughput of a PaaS system (US 9342369 B2, Issued May 17, 2016)
- Verification of complex multi-application and multi-node deployments (US 20140109082, Issued Apr 17, 2014)

## Certifications

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Sun Certified Java Programmer

Sun Certified Web Components Developer

Sun Certified Business Components Developer

IBM Certified Solution Developer in XML 1.1. and Related Technologies

IBM Certified Solution Designer - Object Oriented Analysis and Design

## Current Areas of Interest and Exploration

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Generative AI, Cloud, Mathematics for Machine Learning, Large scale architectures.