Ashwanth Fernando

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Work Rights

Australia: Australian Citizen
United States: E3 visa (similar to H1-B and TN-1), no quota, no sponsorship needed, unlimited renewals
[Click here for E3 Visa Infographic]

Skills

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 efficient execution | Relentless pursuit of pragmatic excellence | Building relationships within and across teams to broaden impact

Experience

Principal Consultant, Atlassian, WEX, Coles, Macquarie Bank   Feb 2022 - Present Day

- Served as a strategic engineering architect, driving technical roadmaps, architectural reviews, and production readiness across multiple client engagements.
- **Coles:** Shaped a reactive Back-End-For-Front (BFF) layer to efficiently handle high-volume transactions for Coles.com.au. Delivered core services (Continuity, Shoppable Recipes, Trolley upgrades) that supported major revenue streams.
- **WEX:** Led backend modernization efforts for billing and reporting services, reducing billing inconsistencies by 14% and significantly improving speed and reliability of monthly statements.
- **Atlassian:** Architected a consistent-hashing load balancer for active-active Elasticsearch clusters, boosting Confluence search availability by 4% globally.

Software Engineer, Packsmith   July 2024 – Nov 2024

- Directed the end-to-end technical strategy for a distributed reverse logistics platform, collaborating closely with PMs on architectural decisions, design standards, and code quality.
- Oversaw the rapid development of a robust backend stack—from application through GraphQL to database—delivered within a one-month deadline.
- Pioneered a priority/vip tagging system for Shopify feeds, improving shipping times for priority orders by 140%.
- Streamlined workflows in Temporal to optimize shipment flow, ensuring accurate stage progression and significantly reducing operational overhead.

Engineering Manager|Staff Engineer, Canva, Sydney, Australia   Nov 2018 - Jan 2022

- Transitioned from an early-stage individual contributor to leading a team of six engineers, guiding the development of back-end infrastructure for five innovative products—Canva Live, Playlist, Talking Presentations, Reactions, and Presentation Remote Control.
- Balanced product ownership, people management, project oversight, and hands-on coding (20% capacity), ensuring both team effectiveness and technical excellence.
- Authored three patents based on original work in live interaction features and large-scale presentation technology.
- Published technical blogs on Canva's engineering platform and delivered internal talks on auto-correct methodologies.
- Scaled Canva's search infrastructure from 20M to 80M users, introducing optimization strategies that maintained sub-second latency under heavy load.

Senior Staff Engineer, eBay, San Jose, California   Nov 2018 - Jan 2022

- Headed the design of a dynamic configuration system for search result templates, enabling business teams to adapt search UI/UX without direct engineering involvement, cutting weeks off typical release cycles.
- Developed highly available backend services in Scala, powering eBay's chatbot conversations and scaling to millions of daily interactions.
- Created an open-source regression-testing framework (Regressr), adopted across multiple departments for real-time performance comparisons between service versions.
- Led multiple project teams of six or more engineers, setting technical vision, coordinating development roadmaps, and facilitating inter-team collaboration.

Software Engineer L5 (ICT 5), Apple, Cupertino, California   SEP 2013 - OCT 2014
- Acted as technical lead for a globally distributed load balancer with 99.99% availability, supporting device upgrades and activations at massive scale.
- Oversaw a team of 12 engineers, managing project timelines, code quality, and architectural decisions. Regularly facilitated consensus-building on design proposals and led strategic engineering initiatives.

Staff Software Engineer, Walmart, San Bruno, California   OCT 2010 - SEP 2013
- Served as architect and technical lead for Walmart Canada's SEO platform and base-variant management system, reducing bounce rates by 30%.
- Drove cloud infrastructure modernization efforts across a large-scale fleet, earning two patents and decreasing deployment cycles significantly.
- Instituted an enterprise-wide configuration management framework, unifying deployment practices for over 200 microservices.

Consulting Engineer, BestBuy, Walgreens, Pearson VUE   AUG 2005 - SEP 2010
- Provided full-stack advisory and hands-on engineering for web-scale backends, focusing on reliability, resilience, and high-traffic optimizations.
- Led implementation of JSP-based backend services and front-end templates for retail and testing clients.
- Developed offline batch processes for advanced fraud detection, enabling proactive identification of high-risk transactions.

Certifications

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

Patents

- Systems and methods for remotely controlling electronic presentations (2021221388, Issued Mar 9, 2023)
- Systems and methods for storing and replaying presentations with video and audio (US 20230205808, Filed May 26, 2021)
- Systems and methods for interactive presentations (US 20230205552, Filed Jun 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)

Current Areas of Interest and Exploration

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