Jay Gurnani (古杰)

Senior Software Engineer / Engineering Team Lead

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☰ SKILLS

PROGRAMMING
Golang • Java •Kotlin • Typescript •JavaScript • C# • .NETCore • Python •Spring Boot •Node •ReactJS • NextJS

SOFTWARE ARCHITECTURE
GraphQL • Object Oriented • RESTful & Event driven architecture • gRPC

AI ENGINEERING
MCP Server

CLOUD COMPUTING
AWS • Microsevices • Docker • Terraform • Queueing (Kafka / ActiveMQ / SQS) • Storage (OpenSearch / DynamoDB / S3)

DATABASE
SQL • NoSQL • Performance tuning

ENGINEERING LEADERSHIP
Requirements analysis • Sprint planning • Customer pre-sales • People management

METHODOLOGIES
Agile • Waterfall • Test Driven Development • SCRUM

🎓 EDUCATION

UNSW
MASTER (WITH EXCELLENCE) OF INFORMATION TECHNOLOGY
Sydney, Australia
High Distinction Average (Top 9% in class)

BS IN COMPUTER SCIENCE
Sydney, Australia

🌐 LANGUAGES

Native proficiency:
English • Mandarin Chinese

Business proficiency:
Hindi

💼 EXPERIENCE

TIKTOK SENIOR SOFTWARE ENGINEER | GOLANG, PYTHON
📅 Sept 2024 –Present 📍 Sydney, Australia
Developer for the Video Quality Platform team reporting on global video analytics for internal use

- Sole overseas developer for **143 global metrics** used by **90+ SREs** within the technical operations team
- Worked with the US / EU technical operators to convert requirements into **Chinese documentation** for CN dev teams
- Designed and built analytics to track **SLO, query response times and other metrics** for Video Quality Platform across 5 regions
- Upgraded the platform codebase from 0% unit test code coverage to **42% in 4 months** and built **2 MCP** server endpoints for LLM access
- Built asynchronous query engine using Spark, Kafka and Clickhouse to query **25 petabytes of video analytics data** in under 60 seconds

TRAINLINE ENGINEERING TEAM LEAD | C#, SQL
📅 May 2023 - June 2024 📍 London, United Kingdom
Team lead for the Ecommerce team handling all payments for train tickets across Europe

- Engineering team lead for 10 engineers handling **£4.3 billion** in sales annually
- Drove feature specifications, timelines & company wide negotiations for 2 key migrations projects worth **£500,000** from SQL to AWS DynamoDB and OpenSearch
- Planned engineering team OKRs and got **2** junior engineers promoted to senior engineers within 1 year
- Introduced new Jira service portal to handle and triage automatically 20+ weekly technical requests improving team productivity by **10%**
- Used performance data to split the team 2 squads with streamed priorities and OKRs to improve team focus by **20%**

ATLASSIAN SENIOR SOFTWARE ENGINEER | KOTLIN, JAVA, REACTJS
📅 May 2020 –May 2023 📍 Sydney, Australia
Founding engineer for the developer platform portal 'Compass' which is used to manage software services in one tool

- Brought daily active users in 'Compass' from 0 to **8000** over 9 months
- Organised customer **10+** interviews to gather functional requirements for the 'activity feed feature' in Compass
- Successfully shipped the 'activity feed' feature to show software lifecycle for a service to **400** daily active users using GraphQL, PostgreSQL and ReactJS
- Lead public GraphQL API developer and **wrote GraphQL linter** to automate GraphQL validation across the company
- Built Compass and Jira 'incident issue type' sync by efficiently parsing and filtering **1 million request** per minute using minimal memory footprint
- Interim engineering manager for **7 months**, mentored 8 developers & conducted over 20 technical interviews for team hires

CERTIFICATIONS

2016 - Microsoft 70-461 : Querying SQL Server • 2021 - Udemy: Kotlin for Java Developers

OPEN SOURCE

Contributor: GraphQL-Markdown
Contributor: DJI Android Mobile SDK

PERSONAL PROJECT

Launched own Solana coin to learn more about Crypto

EXPERIENCE

STEPSTONE GROUP Senior Software Engineer | C#, NodeJS
📅 May 2018 –April 2020 📍 London, United Kingdom
- Built a producer & consumer microservice emailing system capable of sending **2 million** emails per day emails per day
- Designed and built 4 high volume microservice systems (upwards of **1 million requests**) per day that handled email subscriptions, job searching and event tracking
- Architected and built a ReactJS & NextJS application that came in 3 flavors : iFrame, embedded widget and a fully hosted website for 3rd party clients to integrate with and integrated these with **6 clients**
- Travelled to overseas offices to train offsite teams in writing high performing C# code and AWS queuing technologies such as SES and SNS

LEAP LEGAL SOFTWARE Software Engineer | C#, Terraform
📅 Nov 2016 –May 2018 📍 Sydney, Australia

PWC Software Engineer | C#, SQL
📅 Jan 2013 –July 2016 📍 Sydney, Australia

PUBLICATIONS

[1] M. D. A. Fotouhi and M. Hassan. Dronecells: Improving 5g spectral efficiency using drone-mounted flying base stations. *IEEE Transactions on Mobile Computing*, 2018.