Pulkit Goel

Tech Lead | ML Infrastructure & Large-Scale Systems

EXPERIENCE

Tech Lead/Staff SWE, Search ML Infrastructure Google

📋 2023 - Present

- Mountain View, CA
- Drove strategic direction and architected a production-scale LLM inference framework, adopted by 150+ client teams and supporting over 2500 QPS, significantly accelerating product development and scaling ML capabilities across Google Search.
- Directly enabled the launch of critical features like AI Overviews and numerous new experiments/launches for Google Search by increasing offline TPU duty cycle to >70%—a crucial launch requirement that minted significant new capacity equivalent to tens of thousands of chips (O(10,000s)) from existing resources—through novel traffic optimization and hardware fungibility, despite no new TPU grants since 2024.
- Championed and successfully launched multiple Google-wide infrastructure optimizations, partnering with Flume & LLM Deployment teams to define OKRs and steer progress, resulting in lower cost-per-million-tokens and higher duty cycle.
- Served as a lead subject matter expert, providing dedicated technical support to over 200 engineers, which accelerated successful platform adoption and unblocked critical development efforts for numerous client teams.

Senior Software Engineer, Search Infrastructure Google

2020 - 2023

- Mountain View, CA
- Co-designed and drove development of APIMirror, a service enabling products like Gemini Extensions to securely interact with third-party APIs.
- Led a team to build 3PDB, a scalable C++ platform ingesting 30 terabytes of structured data daily from thousands of third-party providers, now a Google-wide standard.

Software Engineer, Data Ingestion Infrastructure Google

2015 - 2020

- Mountain View, CA
- Built and scaled numerous large-scale C++ distributed systems, including the first backend for the public Google Indexing API and the serving infrastructure for Google News.

INTERNSHIPS

Software Engineer Intern

Facebook

□ 2014

Menlo Park, CA

Software Engineer Intern

Directi

2013

Mumbai, India

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ABOUT ME

"Staff Engineer combining a decade of systems expertise with a passion for ML infrastructure. I build highly efficient, next-generation platforms to tackle core ML challenges and deployment bottlenecks."

TECHNICAL SKILLS

ML & Data Infrastructure

Large-Scale Distributed Systems

ML Workload Optimization

LLM Inference & Serving

API Design

PERSONAL PROJECTS

JeopardyGPT 69

Built a complex, multiplayer web game using LLMs.

EDUCATION

B.Tech (Hons) & MS by Research, CS International Institute of Information Technology (IIIT)

2010 - 2015

Hyderabad, India

HONORS & AWARDS



ACM-ICPC World Finalist § 2014 & 2015

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23 Peer Bonuses

Received last year for impact and collaboration on ML infrastructure.

PUBLICATIONS

- P. Goel, "Load balancing on the cloud," M.S. thesis, International Institute of Information Technology, Hyderabad, 2017.
- P. Goel, K. Rishabh, and V. Varma, "An alternate load distribution scheme in dhts," in 2017 IEEE International Conference on Cloud Computing Technology and Science (CloudCom), IEEE, 2017, pp. 218–222.
- P. Goel, L. Srinivasan, and V. Varma, "An adaptive routing scheme for heterogeneous data-flows using openflow," in 2015 IEEE International Conference on Cloud Computing in Emerging Markets (CCEM), IEEE, 2015, pp. 52–58.