## SATPREET MAKHIJA

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## WORK EXPERIENCE

Google

Mar 2024 - Sept 2025

Google Distributed Cloud (GDC), Software Engineer

- As a part of Google Distributed Cloud's artifact management and monitoring team, contributed to multiple key projects including container registry, signature verification, monitoring system, and several major engineering excellence initiatives.
- Implemented and launched a container registry (think DockerHub equivalent) for an air-gapped version of Google Cloud; programmed using Kubernetes controllers as the registry needed self-healing.
- Designed and built a signature verification mechanism for container images.
- The feature enabled software integrity checks while shipping Google software to on-premise data centers.
- Designed and implemented the networking architecture for the artifact registry product.
- Created a secure networking mesh using Istio to connect artifact distribution and monitoring of workloads across multicluster GDC environments.
- Implemented the monitoring stack to scale metrics scraping from system workloads.
- Designed an API for customers to scrape metrics and use it to set alerts, and dashboards using Grafana.
- Used Kubernetes, controllers, operators, CRDs, Helm, Istio, Prometheus, and other cloud technologies.
- Participated in the team's on-call rotation and on-duty rotations to solve customer issues and fix bugs.
- Mentored an intern to drive the execution of a metrics adapter to collect metrics in OpenTelemetry format.

**Google** Jul 2022 - Mar 2024

Strategic Cloud Engineer

- Implemented a proof of concept for an AI product, Data Insights, to query tabular data using natural language. Data Insights is now publicly available in Google Cloud's data management product.
- Worked on open-source Dataproc tools that helped perform in-cloud big data tasks using Spark and Hadoop. Delivered a feature with end-to-end ownership that automatically transfers data from MongoDB to BigQuery.
- Implemented and tested infrastructure-as-code for a shopping platform to automate their infrastructure resources provisioning, such as Kubernetes clusters, private networks, and organization policies on the cloud.
- Collaborated with different project engineering teams of Google Cloud to add new features to cloud products. Represented Google Cloud to external stakeholders to help adopt cloud technologies.

## **EDUCATION**

Ashoka University

Aug 2018 - Apr 2022

Bachelors of Science (Honours) Computer Science Department of Computer Science

Major CGPA: 3.74/4

TECHNICAL SKILLS

Programming Languages Frameworks and Tools Golang, Python, Typescript, Javascript, Terraform, Nix NodeJS, Docker, PostgreSQL, Kubernetes, Istio, Git, Linux