Pranjal Upadhyaya

Data Engineer

Results-oriented Data Engineer with nearly 3 years of experience designing, building, and optimizing large-scale data systems in cloud environments. Highly proficient in Python, SQL, and AWS, with hands-on expertise in developing robust APIs, architecting microservices, and creating scalable data pipelines that process multi-terabyte datasets daily. Demonstrated success in database optimization, achieving significant performance and storage improvements, and leading cross-functional teams to deliver high-impact solutions. Adept at leveraging advanced ETL frameworks, modern cloud platforms, and best engineering practices to drive data-driven decision-making and business value.

Experience

Data Engineer (April 2024-Present)

Astuto.ai

Fulltime | 1 year 2 months

- Developed and maintained 100+ APIs, contributing extensively to API development initiatives.
- Managed and optimized API microservices architecture to ensure high performance and scalability.
- Designed, built, and maintained multiple scalable data pipelines using Dagster, ingesting and processing multiple terabytes of data on a daily basis.
- Worked extensively with PostgreSQL and ClickHouse databases, overseeing database maintenance and optimization.
- Utilized database systems for advanced data analysis to support business decision-making.
- Gained extensive hands-on experience with AWS, deploying and maintaining cloud resources to ensure secure, scalable, and reliable infrastructure.
- Led end-to-end development of high-volume data pipelines to ingest and transform AWS Cost and Usage Reports (CUR), analyzing and processing multi-terabyte datasets for storage in PostgreSQL and ClickHouse databases.
- Optimized database performance through partitioning, indexing, and distributed processing strategies to efficiently handle massive data loads.
- Designed and implemented fault-tolerant ETL workflows using Dagster, ensuring data integrity across a microservices architecture.
- Developed the entire API infrastructure for fetching multi-terabyte AWS CUR data stored in PostgreSQL and ClickHouse databases.
- Optimized large customer-facing APIs to achieve response times of less than 100 milliseconds by implementing advanced query optimization techniques and strategic indexing on frequently queried database columns.
- Led the end-to-end development of cloud cost calculation modules, overseeing both data pipeline and API development and maintenance, and managed a team of 4 developers to deliver robust, scalable solutions for accurate cloud cost analytics.
- Collaborated as part of a four-member team to optimize database systems, achieving a 75% reduction in database size through data migration, targeted data deletion, and API modifications for compatibility with the streamlined data structure.

Personal Information

Current Address

Bangalore, Karnataka, India

Permanent Address

Renukoot, Uttar Pradesh, India

Phone

+91 9763953468

Socials

rktpranjal@gmail.com

www.linkedin.com/in/pranjal4107

github.com/pranjal-upadhyaya

Experience

2 year 11 months

Technical Skills

Python

SQL

Docker

AWS

Git

CI/CD

Data Pipelines

ETL

API Development

Experience

Data Engineer (July 2022-March 2024)

Oceanfrogs

Fulltime | 1 year 9 months

- Created Selenium based web scrapers to extract data from various websites.
- Created and maintained python based data pipelines.
- Heavily involved in data cleaning and feature engineering.
- Frequently undertook DB migrations and optimizations to improve data quality and consistency.
- Created custom dashboards and data extraction tools for visualizing and analyzing data using Appsmith. These were used by the sales team to close deals.

MS Researcher (May 2019-March 2020)

Inter University Center for Astronomy and Astrophysics, Pune

Fulltime | 1 year

- Performed Data Analysis of Stochastic Gravitational Wave Background.
- Solved complex mathematical problems and learned to use Python in solving problems pertaining to statistics.
- Learned advanced linear algebra and algebraic geometry during the MS project.
- Thesis: Improving the Radiometric Search of Stochastic Gravitational Wave Background with a Natural Set of Basis Functions

Education

Bachelor & Master of Science (BS-MS): Physics

Indian Institute of Science Education and Research, Pune

2015-2020

Higher Secondary

Bhavan's K.D.K.V.M, Renukoot

2013-2015