# **Ishank Sharma**

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#### **SUMMARY**

Software engineer with 3+ years at a unicorn startup in backend, ML, and data engineering. Cut costs by 70% and latency by 80% through optimized data pipelines. Currently pursuing a Master's in Computer Science (advanced AI, database systems) and researching gaze-pattern detection in digital ads. Seeking an internship to leverage proven engineering skills and fresh academic insights.

#### **EDUCATION**

California State University, Long Beach

Master of Science in Computer Science

Ramaiah Institute of Technology

B.E in Information Science and Engineering

**SKILLS** 

- Cloud Technologies: AWS, Snowflake, Databricks, Firebolt, Serverless Architecture
- Data Engineering: Data Modeling, Data Pipelines, Data Warehousing, Database Migration, Data Governance, Data Lake
- Backend Development: REST APIs, Microservices, System Design, Scalability, Concurrency, Asynchronous Processing, API Design, Distributed Systems
- Machine Learning: Recommendation Engines, Statistical Modeling, Deep Learning, Large Language Models, Feature Engineering, Model Deployment, A/B Testing, Time Series Analysis

### **EXPERIENCE**

### California State University-Long Beach - College of Business, Long Beach, California

**Graduate Research Assistant** (Python, Deep Learning)

February 2024 - Present

Graduating May 2026

August 2017 - May 2021

GPA: 4.0/4.0

GPA: 3.75/4.0

• Executed a user behavior research initiative focused on digital ad interactions, discovering key design principles grouped by demographics to amplify user engagement and ad click-through rates.

### CommercelQ

CommercelQ is a unicorn startup revolutionizing Al-powered e-commerce advertising management for 2,200+ global brands.

**Software Engineer II** (Python, Java SpringBoot , Databricks, SQL, Snowflake)

August 2021 - July 2024

- **Budget Prediction System:** Developed a budget recommendation system, using statistical models on historical data that predicted advertising spend with 95% accuracy, leading to a \$200k reduction in wasted ad spend.
- **Data Model Platform for Al-Driven Deck Builder:** Constructed the data infrastructure for an Al-powered presentation generator, which automatically created weekly decks, elevating data comprehension and client satisfaction scores by 40%.
- Cold Start Solution: Executed a novel data synthesis strategy using SQL to blend sales and ad campaign performance data, driving highly relevant product recommendations and bolstering engagement among new users by 22%.
- **Optimized Data Pipelines:** Reduced Snowflake pipeline costs by 70% through a strategy of date-specific backfilling, trimming resource use, and eliminating redundant processing.
- Migration from Snowflake to Databricks: Orchestrated a full migration of the budget prediction feature from Snowflake to Databricks, slashing infrastructure costs by 52% and decreasing latency by 80% using indexing and broadcast joins.
- **Developed a Real-Time Advertising Platform:** Spearheaded the development of a real-time bidding platform, processing 500,000+ hourly ad data points; personally wrote 100+ unit tests and maintained a code coverage of 95%.
- **SQL Migration Layer:** Streamlined database migration from Snowflake to Firebolt, simplifying the transition with a custom SQL migration layer using extensible design patterns.

#### Internet Archive, San Francisco, California (Remote)

**Open Source Contributor** (Volunteer Work)

March 2020 - December 2020

- BookGenomeProject.org: Launched an XML parsing pipeline for BookGenomeProject.org, classifying page layouts across
  50,000+ digitized books from Archive.org and boosting full-text search precision for users.
- **Archive.org:** Launched Safari keyboard zoom accessibility feature using Javascript, decreasing user-reported usability incidents by 40% and addressing 90% of Safari accessibility issues within one week.

# **SIDE PROJECTS**

#### Retrieval Augmented Generation Implementation AI

Constructed a Retrieval Augmented Generation (RAG) pipeline utilizing LangChain and open-source language models, achieving a 15% reduction in AI hallucination while improving contextual accuracy based on BLEU scores.

# • Police Patrol Allocation for Crime Records Bureau

Conceived and launched a real-time crime mapping application using MapBox and Vanilla Javascript, leading to the identification of the 3 biggest causes of delayed dispatch.

### Mock Server

Implemented a Node.js-based mock REST server, streamlining API prototyping for eight front-end developers and accelerating feature development cycles by an average of 15 hours per week.