

# Ishank Sharma

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## EDUCATION

**California State University, Long Beach** Aug 2024 - May 2026

**Master of Science in Computer Science**

Key Courses - Advanced Algorithms, Advanced Artificial Intelligence, Advanced Software Engineering

**Ramaiah Institute of Technology, Bengaluru**

Aug 2017 - May 2021

**B.E in Information Science and Engineering**

GPA: 3.75/4.0

Key Courses - Algorithms, OS, Computer Networks, Machine Learning and AI, Databases, Big Data, System Design.

## SKILLS

- **Languages:** Python, Javascript, Java
- **Web Development:** ReactJS, NextJS
- **Backend Libraries/Frameworks:** Spring Boot, NodeJS, Kafka
- **Databases:** MYSQL, MongoDB, Redis
- **Cloud Technologies:** AWS (SQS, Amazon Kinesis, Lambda, Step Functions), Databricks, Snowflake, Firebolt
- **Core Competencies:** Leadership, Communication, Documentation, Problem Solving, Deep Dive, Attention to Detail

## EXPERIENCE

**CommercelQ, Bengaluru, India**

**Software Development Engineer II** (*Python, Databricks, SQL, JavaSpark*)

Aug 2023 - July 2024

- **Budget Prediction System:** Crafted a recommendation engine grounded in statistical models, using historical e-commerce data enriched with seasonality and weighted factors. This tailored system provided precise advertising budget forecasts, aligning spend with sales uplift and maximizing efficiency.
- **Data Model for AI-Driven Deck Builder:** Engineered the data foundation for an AI system that autonomously generated weekly client presentation decks, leveraging large language models. This improved prompt accuracy and distilled data insights, making reports more actionable for clients.
- **Feature Adoption Metrics:** Built pipelines with data from New Relic and Heap, processing user behavior to track and forecast feature adoption. These insights empowered teams to fine-tune new features for stronger engagement.
- **Cold Start Solution:** Tackled the cold start challenge by architecting a SQL workflow that synthesized sales and ad data, yielding robust recommendations for new customers with no prior data.
- **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:** Led a seamless migration of the budget prediction feature, reducing infrastructure costs by 52% and cutting latency by 80% using indexing and broadcast joins. This upgrade positioned the system for advanced AI capabilities.

**Software Development Engineer I** (*Java, Spring Boot, MongoDB, Snowflake, AWS*)

May 2021 - July 2023

- **Developed a Real-Time Advertising Platform:** Built campaign management platform for fetching real-time (hourly) ads and sales data, enabling users to perform real-time bidding on the CommercelQ e-commerce platform for Amazon, Walmart, Target and Instacart etc.
- **Created Action Handler Service for Criteo:** Developed a service to process strategic actions via SQS on Criteo's ad platforms, such as adjusting bids and budgets based on predefined conditions at specific times during the day.

**Software Development Engineer Intern** (*Firebolt, Snowflake, New Relic, SpringBoot*)

Feb 2021 - May 2021

- **SQL Migration Layer:** Streamlined database migration from Snowflake to Firebolt, simplifying the transition with a custom SQL migration layer.
- **New Relic Dashboard:** Delivered a dashboard for page load metrics, aiding in performance assessments and refining user experience.

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

**Open Source Contributor** (Volunteer Work)

Mar 2020 - Dec 2020

- **Archive.org:** Added keyboard support for zooming in/out on Safari and increased test coverage to improve user experience.
- **BookGenomeProject.org:** Developed an XML parser for identifying page types in Internet Archive books and introduced stop words for improved text cleanup.

## RESEARCH EXPERIENCE

**CommercelQ: Database Performance Researcher**

- **Conducted in-depth research** on **database performance**, comparing Snowflake and Firebolt to identify optimal solutions for scalability and efficiency.

## ACHIEVEMENTS

**Winners** Smart India Hackathon. **Honorable Mention** CommercelQ AI Hackathon, GE Healthcare Precision Hackathon.

**Runners Up** - Reverie Language Hackathon, IEEE Ideathon, Microsoft IncubateIND Innovation Series Hackathon.