# Ishank Sharma

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## EDUCATION

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| **California State University, Long Beach** | Aug 2024 - May 2026 |
| **Master of Science in Computer Science** | GPA: 4.0/4.0 |

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

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| **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, Data Science, Machine Learning and AI, Databases, Big Data, System Design.

## SKILLS

- **Languages**: Python (Advanced), Java (Intermediate), Javascript (Intermediate)
- **Backend Libraries/Frameworks**: Maven, SpringBoot, NodeJS
- **Databases**: MYSQL, MongoDB, RDS
- **Cloud Technologies:** AWS, Databricks, Snowflake, Firebolt
- **Tools:** Maven, New Relic, Heap, CI/CD Pipelines
- **Other Skills:** Building scalable ETL pipelines, data modeling, migration workflows

## EXPERIENCE

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

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| **Graduate Research Assistant   I** *(Python, Deep Learning)* | Feb 2024 - Present |

- Building and Researching deep learning applications in digital marketing, focusing on AI-driven advertising models under the guidance of Professor Aiden Lee.

**CommerceIQ** , **Bengaluru, India**

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| **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.
- **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.
- **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.

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| **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 CommerceIQ e-commerce platform for Amazon, Walmart, Target and Instacart etc.

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

**Open Source Contributor** (Volunteer Work)

- **BookGenomeProject.org:** Developed an XML parser for identifying page types in Internet Archive books and introduced stop words for improved text cleanup.

## ACTIVITES

- **Apostle Incubator, CSULB**: Tech Collaborator with MBA students to develop an Airbnb-like platform to solve parking problems. The product recently won a $2,500 grand prize after a successful pitch presentation.

## PROJECTS

- **Semantic Data Navigator:** The Semantic Data Navigator is a Jupyter Notebook designed to process and analyze textual data using advanced natural language processing (NLP) techniques. It leverages OpenAI's embeddings and LangChain to load, split, and semantically search documents while providing visualization capabilities with t-SNE and Plotly.
- **Classification with CNN**: Designed CNN models for CIFAR-100 dataset classification, benchmarking performance and experimenting with architectures.
- **Police Patrol Allocation for NCRB:** Developed a smart patrol allocation system that visualizes hot zones and provides real-time alerts to enhance police responsiveness.

## ACHIEVEMENTS

- **Winner, Smart India Hackathon 2020:** Designed an interactive map-based system for police monitoring and deployment.
- **Runner-Up, Microsoft IncubateIND Innovation Series Hackathon:** Created a women's safety solution using voice assistants for real-time distress alerts.
- **Honorable Mention CommerceIQ AI Hackathon**: Leveraged LLMs to classify product reviews by sentiment.