Ishank Sharma

Long Beach, California Portfolio | LinkedIn|Github|Email: ishankdev@gmail.com | Cell: +1 (562)-341-2003

EDUCATION

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

Ramaiah Institute of Technology, Bengaluru Aug 2017 - May 2021
B.E in Information Science and Engineering GPA: 3.75/4.0

TECHNICAL SKILLS

- **Languages**: C, C++, Java, Python, Javascript
- **Libraries**: SpringBoot, NodeJS, Flask, Keras, Tensorflow, PyTorch, Scikit Learn
- **Databases**: MYSQL, MongoDB, Redis, Databricks, Snowflake, Firebolt (Intermediate)
- **Operating Systems**: Windows, Linux, MacOS

EXPERIENCE

California State University-Long Beach - College of Business, Long Beach, California
Graduate Research Assistant *(Python, Deep Learning)* February 2025 - Present

- Re-engineering and fine tuning a low cost eye gaze and face detection application to accurately capture eye movements and gaze patterns in response to digital advertisements leveraging my web development and machine learning skills

CommerceIQ
Software Engineer II *(Python, Java SpringBoot , Databricks, SQL, Snowflake)* February 2021 - August 2024

- **Budget Prediction System:** Developed a budget recommendation pipeline using SQL, performing extensive data preprocessing and data cleaning on historical data, that predicted advertising spend with 95% accuracy, leading to a $200k reduction in wasted customer ad spend.
- **Designed and implemented** backend data infrastructure for a real-time advertising platform, encompassing data collection, data storage, and data processing of 500,000+ hourly ad data points, ensuring data integrity and scalability..
- **Cold Start Solution:** Executed a novel data synthesis strategy using SQL to blend sales and advertising performance data, driving highly relevant product recommendations. This enabled new clients with no historical data to get accurate Ad spend recommendations by 90%.
- **Optimized Data Pipelines:** Reduced Snowflake pipeline costs by 70% and improved resource allocation and resource optimization through a strategy of date-specific backfilling, trimming resource use, and eliminating redundant processing, enhancing overall system planning.
- **SQL Migration Transformer:** Streamlined database migration from Snowflake to Firebolt, simplifying the transition with a custom SQL migration layer using extensible design patterns.
- **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.

Internet Archive, San Francisco, California
Open Source Contributor March 2020 - December 2020

- **Archive.org:** Added keyboard support for zooming in/out on Safari and increased test coverage.
- **OpenLibrary.org:** Enhanced SEO by adding metadata to the index page, improving search visibility and ranking.
- **BookGenomeProject.org:** Developed an XML parser for identifying page types in Internet Archive books and introduced additional stop words for improved text cleanup.

LEADERSHIP and EXTRACURRICULAR ACTIVITIES

Apostle Incubator: Tech Consultant for MBA Students and learning how to build product adoption among customers.
Google Developers Student Club, Core Team Member: Help the day to day club activities, and manage the club website.

SIDE PROJECTS

- **Retrieval Augmented Generation Implementation AI**
  Constructed a Retrieval Augmented Generation pipeline utilizing LangChain, Python, achieving a 40% reduction in AI hallucination while improving contextual accuracy based on BLEU scores.
- **HyperParameter Tuning and Experiments with Deep Learning:** Explored multiple optimizers. Plotted training and validation loss curves. Identified optimal hyperparameters for best test accuracy of MNIST dataset.

ACHIEVEMENTS

- **Winner, Smart India Hackathon:** Designed an interactive map-based system for police monitoring and deployment with real time alerts sent from user's phone in case of emergency.
- **Runner-Up, Microsoft IncubateIND Hackathon:** Engineered an innovative women's safety platform by scraping Instagram posts and comments to extract real-time sentiment data, then leveraging geospatial analytics to dynamically designate locations as safe or unsafe.
- **Honorable Mention CommerceIQ AI Hackathon**: Leveraged LLMs to classify product reviews by sentiment, enabling direct competitor comparisons and actionable insights for strategic brand positioning.