

EXPERIENCE

- Senior Data Engineer and R&D Lead | Miix Analytics | ON, Canada

July 2023 - Present

 - Led a team delivering advanced Marketing Mix Models (MMMs) for CPG and retail clients to optimize \$50–\$80M marketing budgets.
 - Engineered scalable automation frameworks that standardized data pipelines, accelerated model diagnostics, and enabled rapid generation of performance insights—reducing operational costs by 25% and improving delivery timelines.
 - Developed analytical capabilities to automatically evaluate media saturation curves, diminishing returns, and channel response behaviors, enabling faster optimization decisions and deeper understanding of media efficiency.
 - Partnered with C-suite and senior leadership to translate complex statistical outputs into clear, actionable strategies that improved marketing allocation, forecasting accuracy, and long-term planning.
 - Tech stack: Data Modeling, Python, SQL, BigQuery, Redis, AWS (S3, Lambda, Amplify), Google Looker Studio, GCS, Cloud Run
- Software Engineer | Spire Global Inc. | ON, Canada

Nov 2022 - Feb 2023

 - Built high-performance GraphQL APIs for maritime data extraction and satellite imagery processing, enabling vessel detection with RF signal-based tracking.
 - Integrated GIS and OGC Web Map data to enhance algorithm accuracy and scalability.
 - Tech stack: Python, AWS, GoLang, GraphQL, GIS, Image Processing
- Backend Software Developer | Haqdarshak | MH, India

Jan 2021 - Oct 2021

 - Designed and deployed RESTful microservices serving 10,000+ daily active users.
 - Engineered a scheduling backend that streamlined India’s COVID vaccination system, optimizing logistics for nationwide rollout.
 - Improved data workflows, boosting retrieval speeds by 40% while ensuring reliability and data integrity.
 - Tech stack: Python, Django, REST APIs, Data Engineering, Docker, Kubernetes, AWS
- Software Engineer | RecruitNet | Hong Kong SAR

Jun 2020 - Dec 2020

 - Built scalable web scrapers with Python, Selenium, and BeautifulSoup to extract ATS data, increasing accessibility by 40%.
 - Automated cron-job pipelines to integrate multiple data sources seamlessly into a recruitment platform.
 - Tech stack: Python, Java, Perl, Selenium, NLP, Data Analysis
- Software Developer Intern | Atliq Technologies | GJ, India

Mar 2019 - July 2019

 - Contributed to a cross-platform video streaming and retail app using React and React Native.
 - Designed backend integrations with SQL, Redis, and Firebase for scalable performance.
 - Tech stack: ReactJS, NodeJS, Firebase, SQL, Redis, PHP

PROGRAMMING SKILLS

Data Engineering: Data Modeling, SQL, PostgreSQL, Redis, AWS (S3, EC2, Lambda), GCS, Airflow, Spark, Kafka

Programming: Python, GoLang, Java, C, C++, JavaScript, TypeScript, PHP

Frameworks/Tools: Django, FastAPI, REST, GraphQL, Docker, Cloud Run, Git, TensorFlow, Looker Studio, Tableau, Firebase

PROJECTS

- Retail Optimization for Behavior Analysis & In-Store Navigation

Python, Django, PostgreSQL, React, NLP, TensorFlow

 - Led design of an AI-driven system for demand forecasting, inventory optimization, and personalized recommendations.
 - Integrated indoor navigation using a modified A* algorithm to optimize customer shopping paths.
- Healthcare Management System (Freelance)

Flask, React, Python, SQLite, AWS

 - Delivered a full-stack healthcare management solution with Flask microservices, JWT authentication, and React-Redux frontend.
 - Built secure APIs for patient scheduling, health tracking, and hospital reporting within 20 days.
- Technical Writing (medium.com/@harshil.99)

Python, Tensorflow, NLP, CNN, Auto-Encoders

 - Neural Machine Translation (NMT) with Attention Mechanism - 17.1K views, 4.8K reads
 - Image Super-Resolution using CNNs and Auto-Encoders - 15.6K views, 7.5K reads

EDUCATION

- Trent University - MSc. in Big Data Analytics (GPA: 4.0/4.0)

May 2021 - Sept 2022

 - Researched deep learning architectures (C-BiLSTM, BiLSTM) for predictive analytics. (bit.ly/cbiLSTM)

ON, Canada
- Gujarat Technological University - BE. in Computer Engineering (GPA: 3.9/4.0)

Aug 2016 - Sept 2020

 - Design Lead at Computer Society of India SB; Mentor, Coding & Hackathon Club.

GJ, India

AWARDS AND ACHIEVEMENTS

- Awarded Employee of the Year (2023) at Miix Analytics for leading high-impact data engineering and R&D projects.
- Named 2024 Global 30-Under-30 by Significant Insights for excellence in research, data, and insights leadership.