Harsh Kumar

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[YouTube Channel](#)   [LinkedIn](#)   [Github](#)   https://harshkumar.in

Experienced Data scientist with solid business background and love for engineering
Total experience of 9 years including experience leading teams of data scientists and analysts

Skills

- **Programming:** Python, SQL, BigQuery, Hive, Scikit-Learn, Pytorch, Tensorflow, dbt, Golang, SAS, Shell Scripting
- **Machine Learning:** XGBoost, Light GBM, Random Forest, Regression, kNN, k-means clustering, Deep Learning
- **Tools:** Git, Google Cloud (GCP), MLFlow, Looker Studio, Tableau, CI/CD, Docker, Hugging Face, Llama-index
- **Other skills:** Statistics, Experimentation, MLOps, Team Management, Mentoring, Stakeholder Communications

Professional Experience

Principal Data Scientist, Ads, Pricing and Supply Teams (Joined as L4 BI Analyst)
Gojek | May 2021 – Present

- Increased Ad revenue by 6.5% by deploying improved keyword mappings based on keyword-merchant similarity
- Led ML pricing for Singapore and generated $50,000 gross take uplift per month through new objective function
- Built end-to-end MLOps pipeline including ETL, feature creation, automated training, serving and monitoring
- Led design & development of next-gen driver positioning product, improved recommendation quality by 15-30%
- Developed pooling module in Go to deliver multiple orders as a batch by single driver to reduce delivery cost
- Designed monitoring + alerting system using BQ, Looker and Airflow which detected 2 critical bugs in 2 months
- Ran 5+ prod experiments (A/B, switchback) including design of experiments & evaluation using hypothesis tests
- Mentored junior analysts to optimise pipelines & standardize processes, freeing up 66% of team's BI bandwidth
- Evangelised good design practices as DS nominee in Architect's group by reviewing and publishing 6 ADRs/RFCs

Senior Manager, Merchant Marketing Analytics (Joined as Analyst)
American Express | April 2016 – May 2021

- Hired and led a team of 4 DS and analysts for 2 years, which included 2 annual cycles of performance review
- Developed 15 predictive models using XGBoost, GBM, kNN, Sequence Mining. Examples include Home Mover Predictor, Wedding Predictor, College Admission Predictor, Home Renovation Predictor, Car Purchase Model
- Built XGBoost model to predict likelihood of picking up calls, driving 3% incremental value by prioritizing calls
- Developed Merchant Anomaly Prediction model that predicts terminal disruption, suppression and surcharge. Deployed the model to multiple geographies which led to a significant cost reduction for Merchant Services
- Designed algorithm to identify customers' travel dates and destinations using DBSCAN and Hadoop Map-Reduce
- Built 4 marketing models for airlines, which predict travel destinations, travel propensity & future airline spend
- Awarded the prestigious GCSG President's Award, 2018 which is awarded to top 2% of Amex employees globally
- Received awards like Most Innovative Thinker, Analyst of Quarter and Custom Consulting Internal Partner Award

Software Engineer II, Merchant Marketing Analytics
Hewlett Packard | July 2011 – April 2012

- Designed and implemented highly scalable test framework which reduced defects and improved test efficiency
- Received HP eAward for outstanding effort and Mini-Improvement Award for design of scalable test framework

Education

CFA Program	Passed all three levels of CFA Program		Aug 2018
MBA	Indian Institute of Management Indore	3.62/4.33	Apr 2016
B.Tech (ECE)	Indian Institute of Technology, Guwahati	8.84/10	May 2011

Personal Projects: i.) [Data pipeline project](#) using Google cloud, docker, python, sql, sklearn, makefile, hugging face transformers and YT API
ii.) Generating fully automated YouTube [videos](#) in python using pre-trained generative AI models for TTS, text-to-image, speech recognition