Harmohit Singh

General Manager - Data Science

Gurugram, India

SUMMARY

With ~12 years of experience in data science across diverse sectors, I excel in applying ML/AI for impactful projects and product innovation, adept at transforming complex data into actionable insights and fostering team collaboration.

SKILLS

Technologies: Machine Learning, Deep Learning, Python, Tensorflow, Keras, PySpark, Bash, Gen AI, AWS

Other skills: Product Development and Innovation, Data Analysis and Interpretation, Data Visualization and Communication, Cross-functional Collaboration

EDUCATION

B.Tech. in Electronics Jul '08 - May '12

PEC University of Technology

Chandigarh, India

PROFESSIONAL EXPERIENCE

General Manager - Data Science

Apr '23 - Present

Paytm Gurugram, India

Led ML and Gen AI initiatives across **Central AI and Ads ML teams**, designing scalable ML pipelines and mentoring a team of ~5 data scientists. Spearheaded end-to-end solutioning, development, deployment, and continuous optimization of **ML pipelines and Gen AI solutions**.

- Optimized the ML pipeline in the Ads ML team, enhancing accuracy and efficiency. Upgraded the data pipeline by adding features and transitioned the algorithm from tree-based models to neural networks, driving an average ~20% increase in ad conversion rates across app properties
- Successfully delivered projects **predicting customer click behavior and churn** (used XGBoost and ANN), enhancing business decision-making. Established A/B testing pipeline and sustained model improvement, achieving a consistent **lift of ~15%**
- Built **AI solutions**, such as a natural language based BI tool enabling rapid decision-making for non-technical users, and voice-based solutions enhancing customer support efficiency. These solutions **resulted in a 90% reduction in man-hours and a 60% decrease in employee costs**
- Implemented cost-saving measures and optimized various processes using data engineering across multiple projects, resulting in a **90% reduction** in compute resources
- Engaged in the decision-making and implementation of app modifications to **enhance traffic and engagement** across multiple businesses. Utilized data science and analytics (with A/B testing) to drive data-informed decisions

AVP - Data Science Sep '21 - Apr '23

EXL Services Gurugram, India

Developed and deployed machine learning solutions addressing attrition, retention, and cross-selling challenges, while managing end-to-end stakeholder engagement, including strategic leadership, delivery oversight, team development, and business relations. Led a multidisciplinary team of data scientists, analysts, data engineers, and project managers.

- Implemented a propensity model (using XGBoost) for call routing, identifying at-risk customers and directing them to specialized retention teams. This approach reduced call transfers and handle time while enhancing overall call ratings. Achieved lift of ~10%
- Migrated ML model scoring and training workflows to a custom AWS-based platform. Implemented ML pipeline for model retraining, evaluation, and scoring. This **reduced infrastructure costs to 1/8th** by eliminating licensing fees
- Oversaw team and revenue growth, business and relationship development, and client/stakeholder management. During my tenure, team size grew by approximately 20% and revenue increased by about 24%

Senior Data Scientist Dec '18 - Aug '21

Epsilon Bengaluru, India

Directed the full machine learning lifecycle, from stakeholder engagement to solution deployment and productionization. Oversaw and supported a team of developers and data scientists through mentoring and management.

- Designed and deployed multiple ML models (XGBoost and ANN) to develop recommendation engines for diverse clients, including hotel chains, retailers, and consumer finance institutions. Achieved notable campaign success, with ~300% revenue growth, 7% increase in open rates, and 21% improvement in click through rates
- Utilized advanced algorithms (ANN, NN embeddings, XGBoost) and champion-challenger approach to build ML pipelines, automating model refresh, enhancement, deployment, and performance monitoring

• Spearheaded **internal initiatives, building code pipelines** and adding features for streamlined modeling and analysis, saving team's time and enhancing capabilities

Data Science Lead Oct '14 - Nov '18

Transorg Analytics Mumbai, India

Worked as a Data Scientist/Analytics Consultant and managed a team of data scientists to assist client in analytics-based business solutions.

- Established big data architecture for a payments bank, enabling organization-wide dashboards and advanced machine learning applications. Automated the whole process with PySpark and bash scripts. Implemented targeted campaigning with a 360-degree customer view, resulting in a response rate increase of ~150%
- Worked with an AMC to develop a redemption prediction model (~11% error) and created a model for targeted product offerings and upgrades for a credit card company, contributing to revenue growth of ~\$70 million

Business Analyst Sep '12 - Feb '14

AbsolutData Analytics Gurugram, India

- · Utilized predictive analytics to identify potential customers for a fashion brand in specific USA regions
- · Conducted trend analysis in the travel and online booking sector to inform product development and marketing strategies