Neelambuj Chaturvedi

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Experience

Walmart Global Tech

July 2022 - Present

Bengaluru, India

Senior Data Scientist, Marketplace science team • Cross Border HTS Classification: Working on a Vision + NLP based model to classify HTS codes for various products being

GoKwik Oct 2022 – July 2025

Applied Scientist 2, ML Science Department

imported exported, currently deployed on Walmart Marketplace

Bengaluru, India

- Return to Origin (RTO) Model: Built and deployed three end-to-end versions of GoKwik's flagship XGBoost-based RTO prediction model on the GoKwik Checkout, serving over 2 million real-time requests/day using both batch and streaming features via an in-house Feature Store. Reduced RTO by 40%, saving 50M annually.
- Model Retraining and Monitoring Pipeline: Designed an end-to-end pipeline to monitor feature distribution drift and trigger retraining. The updated model is deployed in **shadow mode** for validation before production rollout.
- pLTV Prediction: Developed an end-to-end system to predict the pLTV value of a customer event in real time using gradient boosting models on session-level and batch features. Serving 5M+ daily requests. A/B testing resulted in a 10-15% increase in **ROAS** via targeted retargeting.
- Customer Profiling (KwikAudiences): Built an intelligent system to segment GoKwik customers based on cross-brand buying behavior. Led POCs with D2C merchants to run marketing campaigns using these segments, leading to a 25% ROAS improvement.
- Payment Method Prediction: Developed an intelligent, rule-based approach to predict the preferred payment method for a user on the GoKwik checkout page. A/B testing showed a 2% increase in conversion rate (CR) for D2C merchants.
- Stakeholder Management: Collaborated with product and tech teams to ensure timely delivery of data science models. Defined phase-wise timelines to improve transparency during development.
- Mentoring: Leading a team of 2 Applied Scientists (AS1s), delivering impact through enhancements to the RTO and pLTV models.

Accern AI Senior Data Scientist Jan 2022 - Sep 2022

Bengaluru, India

• Dynamic Taxonomy Labeller: Developed an active learning engine (BADGE and uncertainty estimation) combined with BERT to automate taxonomy labeling of internal documents. Enabled faster training of in-house sentiment models and reduced labeling costs by **40**%.

ZS Associates Jul 2019 - Dec 2021

Data Science Associate Consultant, Advanced Data Science Group

Bengaluru, India

- Rare Disease Patient Identification: Built a gradient boosting model using Positive-Unlabeled (PU) learning to identify patients with rare diseases via healthcare claims. Devised go-to-market (GTM) strategy for reps using prescribing patterns, increasing patient capture by 46% in the US Southeast region.
- NASH Patient Identification and Progression: Developed ML models to detect NASH patients using EHR and NIDDK datasets. Published findings in Nature Scientific Reports (NASHMap). Built a progression model to predict cirrhosis using Optum EHR data, published in Gastroenterology and Hepatology.
- RA2 Dream Challenge: Represented ZS in a computer vision challenge predicting erosion and narrowing scores for rheumatoid arthritis patients from X-rays. Built a multi-stage pipeline using **RetinaNet** for joint detection and **EfficientNet** + attention for scoring. Secured 4th and 8th place among 1,000+ participants (Leaderboard), presented at RSG Dream Conference.
- Unaddressed Opportunities: Built a multi-stage adaptive PU learning system to enrich claims data. Created targeting strategies for breast cancer therapies based on model scores, increasing coverage by 10%.
- Achievements & Leadership: Got a fast track promotion within 1.5 years to DSAC, Mentored 3 DSAs to formulate, design, and deploy ML solutions while deepening domain expertise.

Published Research: Google Scholar

- Ranking and Clustering of Drosophila Olfactory Receptors using Mathematical Morphology Published in *Genomics Journal*, Elsevier (Impact Factor: 3.6)
- DeepRA: Predicting Rheumatoid Arthritis Progression from Joint-Level Radiographs Preprint published on arXiv
- A crowdsourcing approach to develop machine learning models to quantify radiographic joint damage in rheumatoid arthritis

Published in JAMA Network Open, 2022

KAGGLE:

• MICCAI Brain Tumor Radiogenomic Classification Won a bronze medal in the competition (Top 8% rank globally), built a Image Segmentation model coupled with a CNN - LSTM model to predict the regions for tumor

EDUCATION

Birla Institute of Technology and Science Pilani (WILP)

MTech, Artificial Intelligence and Machine Learning

National Institute of Technology Jalandhar

 $B.\,Tech\,\,\hbox{--Industrial and Production Engineering - CGPA}\,\,7.86/10$

TECHNICAL SKILLS

Pilani, India April 2023 - April 2025 Jalandhar, Punjab July 2015 - May 2019

- Programming Languages & Tools: Python, PySpark, SQL, Git, LaTeX, MS Excel
- Machine Learning: Gradient Boosting Models (XGB), Tree based Models, PU Learning
- Deep Learning & NLP: PyTorch, Transformers, BERT, CNN's, Object Detection, Active Learning
- MLOps & Deployment: Docker, Kubeflow, Feature Store, Shadow Deployment, GitHub Actions
- Cloud & Workflow: Google Cloud Platform (GCP), Vertex AI, Airflow