



Sheetal Borar

APPLIED SCIENTIST II

Details

+1 (732) 853-9608
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Skills

Soft skills

Teamwork, Leadership,
Communication

Programming languages

Python (4 years)
Java (1 years)

Frameworks and Libraries

PyTorch, Tensorflow, Keras
Scikit Learn, Pandas, NumPy
PySpark

ML Project domains

Causal Inference
Reinforcement learning
Recommender systems
Computer Vision
Natural Language Processing

Database

MySQL, BigQuery, Excel

Tools

Tableau, Jenkins (CI/CD)
Git, AWS, GCP (Cloud)

Languages

English
Hindi

Miscellaneous

Experimentation, Hypothesis
testing, A/B testing, Causal
inference

Profile

Passionate Applied Scientist with 5 years of corporate experience + Dual degree Masters in Data Science and Artificial Intelligence with Honors. Experienced in researching state-of-the-art machine learning methods. Skilled in communicating complex ML concepts to business stakeholders. Publications in ECIR and IUI. Certified AWS Solutions Architect. WiDS (Women in Data Science) Ambassador 2024.

Employment History

Applied Scientist II at Amazon Prime Video (Commerce optimization), London

DECEMBER 2022 — JANUARY 2024

- Increased prime video rentals by 4.87% in North America by analyzing experimental data and identifying customer segments to personalize the position of offers –
 - Designed a strategy for unbiased data collection by exposing a customer segment to randomized offer positions and evaluated impact by generating synthetic data and inverse propensity weighting.
 - Created a dataset to build a click model by addressing disconnected input and output. Connected multiple data sources to get aggregate features like customer purchasing power and title popularity.
 - Performed drivers analysis using a click model. Used EDA, permutation importance, and model explainability to reliably identify the drivers of a click. Used the drivers to identify customers who have a higher probability to rent.

Machine Learning Engineer at JP Morgan Chase (Finance), Hong Kong

SEPTEMBER 2018 — AUGUST 2020

- Elevated the digital sales and marketing team's strategy by -
 - Predicting with 81.63% F1 score which funds are likely to be sold heavily next month using ensemble models.
 - Led the effort for an AI chat application using NLP libraries like spacy to help facilitate networking at a sales conference.
- Responsible for the growth and development of 2 interns.

Publications

Improving Recommender System Diversity with Variational Autoencoders

FEBRUARY 2022 — SEPTEMBER 2022

- Improved aggregate diversity of recommender systems in eCommerce by 29.71% by creating richer user representations using variational auto-encoders. This resulted in relevant yet diverse recommendations for millions of users.

Robust and Deployable Gesture Recognition for Smartwatches

JUNE 2021 — AUGUST 2021

- Researched the impact of loss functions in an image classification task for improving robustness in smartwatch gesture recognition.

Education

MS in Data Science, TU/e (Netherlands) and Aalto University (Finland)

SEPTEMBER 2020 — SEPTEMBER 2022

- EIT Digital Master School Scholarship 2020-2022
- Selected courses: Deep Learning, Methods of Data Mining, Machine Learning: Supervised, Complex Networks, Reinforcement learning

BEng in Computer Science, HKUST (Hong Kong)