



# Sheetal Borar

## APPLIED SCIENTIST II

### Details

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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. Publication in ECIR and IUI. Certified AWS Solutions Architect. WiDS (Women in Data Science) Ambassador 2024. Winner, Social Impact Awards, Germany 2021. Trained in Indian Classical Music.

## 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 analysing 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.

### Data Science Intern at Bol.com (eCommerce), Netherlands

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. [Springer Publication](#)
- Experimented with modeling approaches like Item2Vec and Item-to-item collaborative filtering to understand the trade-off between scalability and efficiency.

### Research Assistant at Aalto University (Smart Wearables), Finland

JUNE 2021 — AUGUST 2021

- Researched the impact of loss functions in an image classification task for improving robustness in smartwatch gesture recognition. [ACM Publication](#)
- Researched if contextual bandits (LINUCB) could be used to personalize model behavior for individual users based on implicit user feedback.

### 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 81.6% accuracy which funds are likely to be sold heavily next month using ensemble models.
- Responsible for the growth and development of 2 interns.

## 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)

SEPTEMBER 2013 — MAY 2017

- Dean's List 2017 Spring