Nishanth Jayram

CONTACT

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LinkedIn
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EDUCATION

B.S. Computer Science & Mathematics
University of California, Santa Cruz
September 2019 – June 2022

SKILLS

Python
TypeScript / JavaScript
React
Haskell
C / C++
Java
PyTorch
TensorFlow
PySpark
React Three Fiber

EXPERIENCE

Software Engineer

Mastercard, Data & Services **August 2022 – Present**

- Built and deployed ML models for predicting consumer engagement with merchants and merchant offers, using XGBoost and Random Forest architectures.
- Engineered features to capture offer criteria, historical transactions and redemptions data, and merchant + category labels.
- Applied NLP techniques to build merchant + category model features via word embeddings.
- Developed a PySpark model pipeline to build, test, and deploy models at the bank and regional level.
- Built internal dashboards in React/TypeScript to summarize model performance and feature metadata.
- Contributed to internal documentation on best and latest front-end practices in React/TypeScript.
- Worked as release manager to coordinate functional/regression testing and code release across team features.
- Provided guidance and mentorship to junior team members, including supervising team intern on a DS project.
- Conducted interviews for candidate hiring in data science/engineering roles.

Software Engineer Intern

Mastercard, Data & Services **June – August 2021**

- Developed tools to forecast redemption behavior for reward campaigns based on merchant budget and reward value.
- Researched and provided optimizations to existing model for offer-customer matching.

Applied Mathematics REU

University of California, Santa Cruz **July – October 2020**

- Conducted research with Prof. François Monard on geodesic X-ray transforms.
- Analyzed numerical implementations done via MATLAB.

PROJECTS

Karektar

- Bitmap font builder and exporter from custom glyph sets.
- Built in React and TypeScript.

3D AST Visualizer

- 3D tree visualizer for abstract syntax trees (ASTs) generated from JavaScript code.
- Built in React Three Fiber and TypeScript.

Automated Retraining of Cyber-physical Systems

- Senior thesis project, advised by Prof. Daniel Fremont.
- Investigated automated methods for counterexample-guided training to improve robustness of cyber-physical systems.
- Used probabilistically generated data obtained via the Scenic language to design novel sampling schemes.