Kush Bavaria

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Incoming ML Engineering Intern @ NXP

EDUCATION

Massachusetts Institute of Technology (MIT) | B.S. Computer Science & Finance   Expected May 2025
- **Courses:** Computational Thinking and Data Science, Physics: Mechanics, Multivariable Calculus, Microeconomics, Managerial Finance, Fundamentals of Programming, Physics: Electricity and Magnetism, Mathematics for Computer Science
- **Activities/Organizations:** CSAIL UROP Team, MIT Capital Partners, QuMIT, and New Vassar House Government

EXPERIENCE

IBM Watson A.I. Research   March. 2022 - Now
Deep Learning Researcher | Boston, MA
- Developing contrastive learning algorithms and reinforced learning algorithms focused on the SimCLR framework using TensorFlow Hub and PyTorch
- Building towards human-like visual reasoning and neuro-symbolic AI by combing traditional rules-based AI approaches with modern deep learning techniques

Computer Science and Artificial Intelligence Laboratory (CSAIL) MIT   Dec. 2021 - Now
Machine Learning Researcher | Cambridge, MA
- Designed a system to augment a researcher's ability to run experiments on other machines without designing any infrastructure to handle job dispatching and coordination throughout a hybrid cloud environment.
- Streamlined deployment of machine learning experiments, by implementing an execution framework that provides abstractions for interfacing with multiple cloud providers.

Brown University School of Economics   May 2020 - May 2021
Natural Language Processing Research Assistant | Providence, RI | Professor Stelios Michalopoulos
- Wrote Python code for Latent Dirichlet Allocation (LDA) topic modeling of lyrics from the Million Song Dataset and NHS-Ethnography Dataset
- Created algorithm for determining Compute Model Perplexity and Coherence Score within topic modeling clusters

Wharton School of Business   May 2020 - Sep. 2020
Data Science Research Assistant | Philadelphia, PA | Professor Kent Smetters
- Focused on finding information related to the wealth and equity held within startups by developing and analyzing numerous Python Pandas data frames to extract content and find correlations within the data
- Applied SEC S-1/S-1A and optical computer recognition to find shares held within the filings

COMMUNITY INVOLVEMENT

Youth Activities Leader and Event Speaker   Aug. 2017- Now
BAPS Swaminarayan Sanstha Temple | Austin, TX
- Participate in festive performances & assist in designing sets for theatrical productions
- Serving attendees mahaprasad (dinner) after the main assembly, mopping kitchen, and vacuuming the assembly hall

SKILLS, AWARDS, & INTERESTS

Programming Languages:
Java - Full Proficiency | Python - Full Proficiency | JavaScript – Proficient | C- Proficient | R – Proficient | HTML – Beginner

Interests
Quantative Finance| Machine Learning Research | Macroeconomics| Blockchain Technology | Entrepreneurship | Triathlons