Sharvil Katariya

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EDUCATION

STONY BROOK UNIVERSITY
MS in Computer Science
Grad. 2020 | Stony Brook, NY
Cum. GPA: 3.89/4.0
Teaching Assistant: Data Structures, NLP

IIIT HYDERABAD
BTech in Computer Science
Grad. 2017 | Hyderabad, India
Teaching Assistant: Software Engineering

SKILLS

Tensorflow • Keras • PyTorch • XGBoost
HTML5 • CSS3 • Javascript • PHP • AWS
Spark • Kafka • Android • Django • Gulp
MySQL • Numpy • Pandas • Scikit-learn
AngularJS • NodeJS • Bower • Excel

PUBLICATIONS

INDICON CONFERENCE
Coimbatore, India | Dec 2018
A Privacy Preserving Approach to Generate Personalized Recommendation Based on Short Text Classification

ICACCI CONFERENCE
Bengaluru, India | Sep 2018
Machine Learning for Secure Device Personalization Using Blockchain.

ICOST CONFERENCE
Singapore | Jun 2018
A Personalized Health Recommendation System Based on Smartphone Calendar Events.

COURSEWORK

GRADUATE
Machine Learning
Natural Language Processing
Probability & Statistics
Computer Vision
Data Science Fundamentals
Analysis of Algorithms

UNDERGRADUATE
Complexity & Advanced Algorithm
Data Structures
Information Retrieval & Extraction
Artificial Intelligence
Internet of Things

WORK EXPERIENCE & PROJECTS

MICROSOFT | Software Development Engineer
March 2021 - Apr 2023 | Bellevue, WA
- Creation of interest-based user segments constituting to 40% User Growth using Azure Infra & newer ML models on scale for all International Markets.
- Active member of ideation meetings, contributing to 3+ ideas based on the team's work.

MICROSOFT | Data Scientist Intern
May 2020 - Aug 2020 | Bellevue, WA
- Evaluated various model architectures to improve the Ad Click predictions for Bing's Native Ads Team by incorporating event time into sequential models.
- Achieved an 8% AUC boost to 88% on Bing's Ads Re-ranking dataset.
- Secured 2nd place in Microsoft's C&AI Hack for Good Hackathon (Azure).

SAMSUNG | Senior Software Engineer (Data Intelligence Team)
Jun 2017 - Jul 2019 | Bengaluru, India
- Developed scalable ML algorithms and production pipelines to predict smartphone user's demographics interests based on app usage, geolocation, browsing behavior and music/video usage with the help of Spark framework.
- Built a Generic Recommendation Platform, with a plug & play architecture for the addition of any new services to generate recommendations right off the bat.
- Devised short text classification models (including text-based CNN models, FastText, SVM), that is fast & lightweight for life event & context prediction.
- Improved the ML model accuracy by 7% & remodeled the data pipeline.
- Published 3 Research Papers and filed 2 Patents as well as mentored interns.

RETAIL ANALYSIS - COSTELLO STORE | Guidance of Prof. Skienna
- Analyzed Costello Ace Hardware Store's data to provide prospective locations for their new shops using geospatial analysis & data science.
- Product Recommendations for users on the basis of their long and short-term preferences, as well as leveraging the product's popularity.
- Demand forecasting of products on performing time series analysis

ACTION RECOGNITION IN VIDEOS | Computer Vision, SBU
Trained different CNN, LSTM and hybrid networks on VGGNet features extracted from UCF101 dataset for action recognition in videos (PyTorch)

TEMPORAL PREDICTION MODELS | LSI LAB, IIIT
Achieved 96% R^2 score for time series prediction of environmental variable. Used techniques like RNN (LSTM, GRU), ARIMA, SARIMAX models for forecasting with the addition of seasonal and trend-based features.

STOCK PRICE TREND PREDICTION | IIIT
Forecast stock returns on the basis of past returns & company sentiments from news, social media on the application of a variety of supervised ML techniques including many stock related features. (1.1K+ stars)

ACHIEVEMENTS

Apr 2019	Patent	Machine Learning on Blockchain
Jul 2018	Spot Award	Best Employee Award (Data Intelligence team)
Apr 2018	Patent	Secure Device personalization using blockchain