Sharvil Katariya

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EDUCATION

STONY BROOK UNIVERSITY
MS in Computer Science
Expected Dec 2020 | Stony Brook NY

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

SKILLS

PROGRAMMING LANGUAGES
Python • Java • C • C++ • Ruby • Scala

TECHNOLOGY
Tensorflow • Keras • FastText • AWS
HTML5 • CSS3 • Javascript • Django
PHP • Spark • Android • Docker • Perl

PUBLICATION

INDICON CONFERENCE
Coimbatore, India | Dec 2018
A Privacy Preserving Approach to Generating Personalized Recommendations 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
Natural Language Processing
Computer Vision
Data Science Fundamentals
Analysis of Algorithms

UNDERGRADUATE
Machine Learning
Complexity & Advanced Algorithm
Operating Systems
Database Systems
Information Retrieval & Extraction
Internet of Things
Artificial Intelligence

WORK EXPERIENCE & PROJECTS

SAMSUNG | Senior Software Engineer (Data Intelligence Team)
Jun 2017 - Jul 2019 | Bengaluru, India

- 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), 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 1 Patent, primarily based on the work.

VMWARE | Software Engineering Intern
May 2016 – Jul 2016 | Bengaluru, India

- Developed a prototype to integrate Mobile Device Management agent Smart TV (across 5 different platforms) based on the proximity of the user carrying managed mobile device.
- Performed real-time processing using Apache Kafka and Spark Streaming to extract relevant information about meetings.

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 forecast with the addition of seasonal and trend-based features.

SEMANTIC ANNOTATION OF RESEARCH PAPERS | SIEL LAB, IIIT
Annotate any given research paper, based on ACM 's classification hierarchy, using document embeddings to achieve 97 % classification accuracy.

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. (400+ stars)

COMPILER FOR DECAF LANGUAGE | IIIT

- Developed a compiler front-end for Decaf Language (subset of C++)
- Modelled the lexical and syntax analyzer (parser) using Flex/Bison.
- Construction of the Abstract Syntax Tree for the parsed program.
- Configured the compiler to generate LLVM IR for source program, using LLVM module and IR Builder Objects.

WIKIPEDIA SEARCH ENGINE | IIIT
Programmed a highly efficient indexer & retriever for 56GB of Wikipedia data, reranking the webpages to increase P@K, R@K.

ACHIEVEMENTS

Jul 2018	Spot Award	Best Employee Award [Data Intelligence team]
Apr 2018	Patent	Secure Device personalization using blockchain
Feb 2016	Pioneer Makerthon	Finalist for Android app named Bounty Hunter
Oct 2015	Gitex Student Lab	Top 10 Finalist (IoT Project)
Jun 2015	IoTX Hackathon	IoT project for Search and Rescue Missions
Feb 2015	Game On	First Place for Voice-based Web Game