

Sharvil Katariya

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EDUCATION

STONY BROOK UNIVERSITY

MS IN COMPUTER SCIENCE

Expected Dec 2020 | Stony Brook, NY

Cum. GPA: 3.87/4.0

Teaching Assistant: Data Structures, NLP

IIIT HYDERABAD

BTECH IN COMPUTER SCIENCE

Grad. 2017 | Hyderabad, India

Teaching Assistant: Software Engineering

SKILLS

Python • Java • C • C++ • Ruby • Scala
Tensorflow • Keras • PyTorch • XGBoost
HTML5 • CSS3 • Javascript • PHP • AWS
Spark • Kafka • Android • Django • Flask
MySQL • DynamoDB • Docker • Pandas
AngularJS • NodeJS • Bower • Numpy

COURSEWORK

Database Systems
Analysis of Algorithms
Machine Learning
Computer Vision
Data Structures
Complexity & Advanced Algorithm
Operating Systems (OS)
Structured Systems Analysis & Design
Computer Networks
Cloud Computing
Artificial Intelligence
Information Retrieval & Extraction
Internet of Things

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.

WORK EXPERIENCE & PROJECTS

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.
- Secured 2nd place in Microsoft's C&AI Hack for Good hackathon for building a Microsoft Team's Tab Application to provide an interactive virtual class environment leveraging Azure's Cognitive Services as well as Bing APIs.

SAMSUNG | SENIOR SOFTWARE ENGINEER

Jun 2017 - Jul 2019 | Bengaluru, India

- Built Android apps to run short text classification models that are fast & lightweight (<1MB RAM) on Samsung devices.
- Implemented JNI layer to run native code as well as improved the preprocessing pipeline on devices to run 20% faster
- Developed scalable ML algorithms and production pipelines to predict smartphone users' demographics & interests based on app usage, geolocation, browsing behavior and music/video usage as obtained on Android devices.
- Built a Generic Recommendation Platform, with a plug & play architecture for the addition of any new services to generate recommendations right off the bat.
- Published 3 Research Papers and filed 2 Patents, based on the work done.

VMWARE | SOFTWARE ENGINEERING INTERN

May 2016 - Jul 2016 | Bengaluru, India

- Developed a prototype to integrate Mobile Device Management agent across multiple Smart TV platforms including Android, Tizen, FireTV & WebOS.
- Created a web-based application using AngularJS, Node.js, Bower & Gulp
- Architected real-time processing using Apache Kafka and Spark Streaming to extract relevant information about meetings, using Outlook's REST APIs.

COVID DATA ANALYSIS USING SPARK AND HADOOP

Wrote Spark jobs to analyse the COVID-19 dataset, with using distributed caching to speed up runtime to perform spatiotemporal analysis.

COMPILER FOR SUBSET OF C++ SYNTAX

- Modelled the lexical & syntax analyzer (parser) using Flex/Bison (Frontend)
- Abstract Syntax Tree Generation for the parsed program (Backend)
- Configured the compiler to generate LLVM IR for source program, using LLVM module and IR Builder Objects.

WIKIPEDIA SEARCH ENGINE

Programmed a highly efficient indexer and retriever for 56GB of Wikipedia data, reranking the webpages to increase Precision@K, Recall@K.

STOCK PRICE TREND PREDICTION

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 (600+ stars)

ACHIEVEMENTS

July 2020	Third Place	MTA Back on Track Hackathon
June 2020	Second Place	C&AI Hack for Good: Interactive virtual class environment
Jul 2018	Spot Award	Best Employee Award (Data Intelligence team)