

# Sharvil Katariya

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## Education

### Stony Brook University

MASTER OF SCIENCE IN COMPUTER SCIENCE

Stony Brook, USA

2019 - Present

### International Institute of Information Technology (IIIT)

B.TECH IN COMPUTER SCIENCE ENGINEERING

- Teaching Assistant: Software Engineering

Hyderabad, India

2013 - 2017

## Experience

### Samsung

SOFTWARE DEVELOPER

- Working as a Data Scientist, for User Profiling using Machine Learning
- Published 3 Paper(s) & 2 Patent(s)
- Work revolves primarily around recommendation systems, short text classification and building fast lightweight Machine Learning models to run on resource-constrained devices

Bengaluru

June 2017 - PRESENT

### VMware

SOFTWARE ENGINEER

- Worked on building a proximity based, cross-platform Smart TV solution, using web development architecture
- Architected an cloud-based solution as an extension to project's idea, for real-time analysis using Apache Spark Infrastructure.
- Chosen to work on Borathon (Annual Hackathon) winning project

Bengaluru

May. 2016 - July. 2016

### Indian School of Business (ISB), Hyderabad

DATA ANALYST INTERN

- Worked on Data Segregation and to understand relationship between patent inventors network and the firms where they work at, with the help of clustering algorithms.

Remote

June 2015 - July 2015

### Imagine Software Labs

SOFTWARE ENGINEER

- Built web application, named Hellopsych, for online video consultation with doctors.
- Presented HelloPsych at 67th Annual National Conference of the Indian Psychiatric Society (ANCIPS 2015), Hyderabad

Hyderabad

Dec. 2014 - Feb. 2015

## Publications

### RESEARCH PAPERS

#### A Personalized Health Recommendation System Based on Smartphone Calendar Events

ICOST

June 2018

Recommendation system that preserves privacy, based on inference made via calendar entries.

#### Machine Learning for Secure Device Personalization Using Blockchain

ICACCI

Sep 2018

Device Personalization using Blockchain & ML Techniques.

#### A Privacy Preserving Approach to Generating Personalized Recommendations Based on Short Text Classification

INDICON

Dec 2018

Privacy preserving collaborative filtering and content-based filtering approaches to generating personalized recommendations of products, with maintaining the user privacy via SMS and calendar entries.

### PATENT FILINGS

## Method and system for providing secure device personalization in smart home using blockchain

PS: 201841015708

Apr 2018

Singla, Kushal, and Joy Bose & Katariya, Sharvil.

## A Privacy Preserving Approach to Generating Personalized Recommendations Based on Short Text Classification

PS: 201841030575

Aug 2018

Katariya, S., Bose, J., Reddy, M. V., Sharma, A. & Tappashetty, S.

## Projects

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### Semantic Annotation - Wikipedia articles

SIEL Lab, IIIT

ADVISOR - DR. VASUDEV VERMA

Mar. 2016 - Apr. 2016

- The goal was to annotate a research paper, based on ACM classification tree and with an Wikipedia article that matches its contents most closely
- Application of different deep learning models & architecture models like DBOW(Distributed Bag of Words), DM(Distributed Memory).

### Temporal Prediction Models for Environmental Variables

LSI Lab, IIIT

ADVISOR - DR. AVINASH SHARMA, DR. SHAIK REHANA

Feb. 2016 - Feb. 2017

- Application of Machine Learning models, like Extreme Learning Models, RNN, etc. for time series prediction of stream temperature.

### Wikipedia Search Engine

SIEL Lab, IIIT

ADVISOR - DR. VASUDEV VERMA

Jan. 2016 - Feb. 2016

- Retrieve Wikipedia pages related to the query and order them according to relevance, along with the help of a 2-Tier Index

### Ultimate Tic Tac Toe Bot

IIIT

ADVISOR - PRAVEEN PARUCHURI

Jan. 2015 - Mar. 2015

- Designed a AI bot to play the Ultimate TicTacToe Game using MinMax Trees and AlphaBeta Pruning for optimal gameplay.
- Ranked 12th out of 100 teams in Intra-Class Bot Tournament.

## Achievements

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### Spot Award

Bengaluru, India

SAMSUNG R&D INSTITUTE

July 2018

- Best Employee Award for the team
- Improved the ML model accuracy by 7%
- Improving the preprocessing pipeline for the project
- Published a paper & patent based on project 's work

### First Place - IoTX Hackathon

Dubai, UAE

DUBAI SMART GOVERNMENT

June 2015

- Secured First Place for Smart Waste Management System, an Internet of Things project, to help in Search and Rescue Mission in case of emergencies.

### Winner - Game On Event

Hyderabad

FELICITY 2015

Feb. 2015

- Developed an interactive voice-based game

## Relevant Courses

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Natural Language Processing, Computer Vision, Data Science Fundamentals, Analysis of Algorithms, Machine Learning, Information Retrieval & Extraction, Database Systems, Artificial Intelligence, Cloud Computing, Computer Graphics, Principles of Information Security, Advanced Computer Networks, Operating Systems, Internet of Things, Computer Networks, Algorithms, Compilers, Data Structures, Computer System Organization, Digital Signal Analysis & Appl, Introduction to Databases, Digital Logic & Processor, Structured systems analysis & design