# **Sumit Tamgale**

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## **E**DUCATION

## Aug'18-present Illinois Institute of Technology

Chicago, IL, USA

## Master of Science in Computer Science (Expected May 2020)

- Relevant Coursework: Design and Analysis of Algorithms, Software Systems Architectures, Object-Oriented Application Development, Machine Learning, Computer Vision, Geospatial Vision and Visualization
- Recipient of the Graduate Pathways Scholarship

#### Aug'14-May'18 SGGS Institute of Engineering and Technology

Nanded, MH, India

## **Bachelor of Technology in Computer Science and Engineering**

- Relevant Coursework: Data Structures, Algorithms, Statistics, Calculus, Database Systems, Operating System Concepts, Software Engineering, Unix System Programming, Networking, Distributed Computing, Neural Networks, etc.
- GPA: 7.27 (On the scale of 10)

#### EXPERIENCE

#### Jan'18-Aug'18 SARVAHA SYSTEMS PVT. LTD.

Pune, MH, India

## Software Engineering Intern (Jan'18-Apr'18)

- Designed and implemented an information retrieval system to perform logical search queries on raw resume files
- The information retrieval system achieved an F1 score of 0.87 on an internally developed robust dataset

## **Software Engineer** (Jun'18-Jul'18)

- Implemented a configurable customer support chatbot system prototype along with it's admin console
- Designed and reengineered the chatbot admin console to allow highest degree of configuration options

#### Nov'16-Apr'17 Swish Tech LLP

Pune, MH, India

#### Intern - Backend Lead

- Developed secure REST API to support an IoT based application that performs real time event management
- Collaborated with project manager to design data model, formulate software architecture and plan implementation

## PROJECTS AND PUBLICATIONS

## Jan'18-Apr'18 New Position Estimation Algorithm

Ahmedabad, GJ, India

## Project Lead, Department of Space (ISRO), Smart India Hackathon 2018

- Led a team of six to develop a position estimation algorithm that uses the range differences from 4 satellites to estimate position coordinates of the receiver
- Tested the algorithm on ISRO's real satellite data to measure performance of the algorithm

## Aug'17-Dec'17 Disguised Face Classification (Link to Paper)

Coimbatore, TN, India

## Lead Author, IEEE International Conference on Computational Intelligence and Computing Research 2017

- Designed and trained a deep learning system to classify disguised faces and prevent fraud ATM transactions
- Achieved an accuracy of 90.53% using a network of 3 convolutional layers followed by 3 fully connected layers

## Dec'16-Apr'17 Theme Based Video Explorer

Bhubaneswar, OR, India

#### Team Member, Department of Biotechnology, Smart India Hackathon 2017

- The application allows users to browse and stream videos from any web node through a single customizable interface
- Implemented a web scraper to scrape videos and streaming engine to stream videos efficiently

## Aug'16-Oct'16 Chess Clock

Nanded, MH, India

## Project Lead, Independent Academic Project

- Designed and implemented a standalone chess clock application from scratch using Java threads
- Leveraged Java swing, multithreading and event handling to achieve cross platform compatibility

#### **SKILLS**

- Competitive Programming, Software Engineering, Problem Solving, Design and Analysis of Algorithms, Machine Learning, Image Processing, Deep Learning, Relational Data Modeling, REST API
- C, C++, Java, Python, JavaScript, SQL, Spring, TensorFlow, Flask, OpenCV, Elasticsearch, jQuery, DeepLearning4J, NumPy, SciPy, Git, Docker

#### **AWARDS AND ACHIEVEMENTS**

- Best Paper Award IEEE International Conference on Computational Intelligence and Computing Research 2017
- Winner Smart India Hackathon 2017 (Department of Biotechnology), Ministry of Science and Technology, Govt. of India
- Winner C Brain 2017 SGGS Institute of Engineering and Technology, Nanded MH, India
- Runner up Code-em-gamble 2016 SGGS Institute of Engineering and Technology, Nanded MH, India
- Ranked 549 & 686 globally in TCS Codevita 2016 round 1 & 2 respectively
- Qualified ACM ICPC Asia Site Regional Contest 2017

Last edit: 01/23/2019