# Shreyas Bhat

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# **EDUCATION**

#### **USC**

MASTERS IN COMPUTER SCIENCE Los Angeles, USA | May 2021

#### **BITS PILANI**

B.E IN COMPUTER SCIENCE Goa, India | July 2019 Cum. GPA: 9.26

# LINKS

Github://shreyasnbhat LinkedIn://shreyasnbhat

# **SKILLS**

## **PROGRAMMING**

Java • Python • C++ • C Solidity • HTML+CSS

#### **TECHNOLOGIES**

Android • Git • Firebase Flask • Pandas • Numpy Truffle • Jupyter • Vagrant Familiar Spring • Tensorflow • Keras

# **ACHIEVEMENTS**

Merit Scholarship Top 3% (2017-2018) ETH Singapore Hackathon Finalist

# MOOCS

UC Boulder Crypto Specialization deeplearning.ai SUNY Buffalo Blockchain Basics

# TEACHING ASSISTANT

Computer Programming (C/BASH)
Object Oriented Programming (Java)
Software Dev for Portable Devices

# EXTRA CURRICULAR

Sub Coordinator of Mobile App Club Instructor for Android App Development Member of Blockchain Club BITS Goa Member of Google Dev Group BITS Goa Badminton Karate(Black Belt)

# **EXPERIENC**F

#### MICROSOFT RESEARCH

Jan 2019 – June 2019 | Bangalore, India

Research Intern

Advisor : Nishanth Chandran

- Devised protocols for secure matrix multiplications that reduce communication costs by almost 15%.
- Developed a secure computation C++ backend that supports evaluating Convolutions, Matrix Multiplications and ReLus securely.

### **MORGAN STANLEY**

May 2018 - July 2018 | Bangalore, India

Summer Analyst

Manager: Amit Kumar Singh

- Added context to a chatbot to make it conversational.
- Wrote an adapter to render every conversational flow as a graph in Neo4j.

#### **FOSSASIA**

March 2017 - July 2017 | Mumbai, India

Open Source Developer

- Redesigned the application's UI/UX with Google's Material Design
- Added features such as Global Search, a Dashboard and Travis-CI scripts.

# LARSEN & TOUBRO INFOTECH May 2017 – June 2017 | Mahape, India

Software Engineering Intern

- Developed an app to generate dynamic feedback forms using through Firebase.
- Automated analysis of feedback data generated through cron scripts. The analysed reports were used in official reports.

### **PROJECTS**

### MULTI TARGET MULTI CAMERA TRACKING Aug 2018 - Dec 2018

An implementation to track multiple targets in a CCTV network and plot target tracks in a 2D Top View of the CCTV environment. Used Ristani's DeepCC as reference. Monocular depth estimation was also utilized to estimate a 3D estimate for a target.

#### **DECENTRALIZED VOTING**

August 2018 - September 2018

An app which can handle elections on a permissioned blockchain. The voting system employs cryptoeconomic mechanisms to dissuade malicious actors.

### **NETWORK SECURITY IN VANETS**

Feb 2018 - May 2018

Worked to compare efficiency of various Lightweight Authentication Schemes in Vehicular ad hoc networks.

### CROWDINFO: CROWDSOURCING WITH BLOCKCHAIN Nov 2017

Incentivized crowdsourcing through surveys. Zero Knowledge validation of submitted surveys using smart contracts; Off chain identity protocol

### **OTHER PROJECTS**

Since Aug 2015

- Consistent Hashing Visualizer: A simple tool to verify claims put forward by consistent hashing.
- Federated Learning: Privacy preserving machine learning through federated averaging of local client side models. A Blockchain + IPFS system was developed to track node participation and to provide incentives.
- Cross Shard Communication in Ethereum: Prototyped a version of EthereumVM which could support cross shard messages and contract calls.
- **Distributed RNG on Blockchain**: A distributed RNG to introduce randomness on the blockchain using cryptographic commitments.
- Sports Activity Detection : A classifier to classify sport action videos using convolutional and recurrent networks.
- Face Find: An app that helps track missing persons with Computer Vision.