# Saurav Malani

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### **EDUCATION**

#### **IIIT HYDERABAD**

B.TECH AND M.S. BY RESEARCH Computer Science And Engineering CGPA: 7.08 Expected Graduation:2020

## **RELEVANT COURSES**

Data Warehousing & Data Mining\*
DataBase System
Machine Learning
Statistical Methods in Al
Artificial Intelligence
Principles of Information Security
Advanced Computer Networks\*
Operating System
Distributed System
Graphics
(\*Currently pursuing)

#### **ACHIEVEMENTS**

- 300th rank in 11,000 participants in 2018 International Quant Championship
- •Top 0.001% among 1.2 Million Student in All India Engineering Entrance Exam-15. •Winner Al Bot to play Ultimate Tic-Tac-Toe Game.

# POSITIONS

- •Teaching Assistant for Principles Of Information Security Course.
- •Vice-Chair IEEE Student Branch.
- Student Head @ Python Conference Hyderabad-17.
- Placement Committee member.
- •TEDx Volunteer.

# SKILLS

#### **PROGRAMMING**

- C C++ Python Matlab
- Bash Scripting JavaScript
- LATEX CSS PHP
- MYSQL Neo4J
- Assembly MIPS
- OpenGL GO
- Framework:
- Flask Web2py

Search Engine:

• Solr

#### **OPERATING SYSTEM**

Linux

#### **EXPERIENCE**

#### **GSOC** | CLOUD NATIVE COMPUTING FOUNDATION (CNCF)

May-19 - Present | Remote

• Cortex is a distributed monitoring tool. Ingester is a stateful component in the Cortex ecosystem that builds Prometheus chunks from incoming samples. I am working on improving how Ingesters hand over their data when they are being created or deleted in order to easily scale.

#### **BLOOMREACH | SOFTWARE DEVELOPMENT INTERN**

May-19 - Present | Bangalore

• Working with the search quality team to improve the auto-correction algorithm of their Search Engine, by taking phonetics, user behavior & keystrokes into account.

#### KUBERNETES, OPENDAYLIGHT | OPEN SOURCE CONTRIBUTION

May-18 - Dec-18 | Remote

- Worked on updating OpenAPI SecurityDefinition in Kubernetes Python-Client to use Authorization header name, following HTTP standard.
- Solved "test directory listing" issue & Created and Uploaded a Kubernetes Python-Client package to Python Package Index.
- Added a Utility for OpenFlow Plugin, to delete Cookie based flow in one shot.

#### KALHATTI, US BASED STARTUP | CRYPTO ENGINEER

Dec-18 - Feb-19 | Remote

• Developed & Implemented decentralized authentication system using the idea of Threshold Multiparty Signature in React. is for their App.

#### RESEARCH

#### THEORETICAL & APPLIED CRYPTOGRAPHY RESEARCHER

Mar-18 - Present | CSTAR Lab IIIT-H

- Working on developing User Access Control Mechanism for IoT Environment.
- Working on latest cloud based advanced cryptography like Functional Encryption & Homomorphic Encryption.

#### SELECTED PROJECTS

# CRYPTOCURRENCY PRICE PREDICTOR | PYTHON, MACHINE LEARNING LIBRARIES

• Built a price predictor for Bitcoin and Ethereum Cryptocurrency by doing time series analysis using ARIMA & Holt-Winter method.

#### SONG POPULARITY PREDICTOR | SKLEARN, PYTHON

• Built a Song Popularity Predictor to classify a song into different levels of popularity, using supervised and deep learning algorithms.

#### MINI SHELL I C

• Created a Shell from scratch for linux systems capable of handling background and foreground processes, piping, redirection, common BASH commands and employed the use of system calls.

#### ULTIMATE TIC TAC TOE BOT | PYTHON

• Implemented an AI minimax bot that plays 4 by 4 Ultimate tic tac toe and optimized it using alpha-beta pruning and cached transition table