Saurav Malani

+91-8239472824 | saurav.malani@research.iiit.ac.in | saurav-malani

EDUCATION

IIIT HYDERABAD
B.tech and M.S. by Research
Computer Science And Engineering
CGPA: 9.25
Expected Graduation: May 2020

RELEVANT COURSES

Data Warehousing & Data Mining
Database Systems
Machine Learning
Statistical Methods in AI
Artificial Intelligence
Principles of Information Security
Advanced Computer Networks*
Operating System
Distributed System
Graphics

ACHIEVEMENTS

- Dean's List
- Research Award
- Top 0.001% among 1.2 Million Student in All India Engineering Entrance Exam-15.

POSITIONS

- Teaching Assistant of Algorithm Analysis & Design, Principles Of Information Security Course
- 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:
- apache solr

OPERATING SYSTEM
Linux

EXPERIENCE

GSOC | Cloud Native Computing Foundation (CNCF)
May-19 – Aug-19 | 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 | Data Science Intern
May-19 – July-19 | Bangalore
- Improved the Spelling Correction Component of the Apache Solr Search engine, used by Bloomreach, to handle the typographical and phonetic error and then generate suggestions corresponding to the spelling mistake by taking context into consideration, by creating a Hidden-Markov Model with the help of past search logs.

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.

RESEARCH

Theoretical & Applied Cryptography Researcher
Mar-18 – Present | CSTAR Lab IIIT-H
- Published a Journal addressing "Certificate-Based Anonymous Device Access Control mechanism for IoT Environment" in IEEE Internet Of Things Journal.
- 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 | 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