# Sai Harsh Tondomker

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### **EDUCATION**

#### **IIIT - HYDERABAD**

# M.S IN COMPUTER SCIENCE AT C-STAR LAB

2018 - present | Hyderabad, India Research Area: Parallel Computing and Graph Theory

#### **IIIT - CHITTOOR**

# B.Tech(Hons in Computer Science)

2013 - 2017 | Sri City, Chittoor Research Dean's List (Semester 8) Cum. GPA: 8.02

#### NARAYANA JR COLLEGE

SENIOR SECONDARY

2011 - 2013 | 91.2/100 | IPE

#### SKILLS

Programming

C • C++ • Python • JAVA • Matlab • Socket Programming • R • HTML5 • CSS3 • LaTeX

Frame Works QGIS • Web2Py • Django

# COURSEWORK

Data Structures & Algorithms Advance Algorithms & Graph Theory Artificial Intelligence & Machine Learning Operating Systems Computer Architecture Principle of Programming Language(Awarded Hons Certificate)

# ACHIEVEMENTS &

### AWARDS

HackerEarth Campus Ambassador and selected in Internshala Student Partner 6.0.

Certificate for High Performance Parallel Computing course which was held in IIT Madras.

#### **EXPERIENCE**

#### **GOOGLE SUMMER OF CODE** | STUDENT DEVELOPER

May 2018 - Aug 2018

- The goal is to add triconnected decomposition to graph library of SageMath.
- Addition of Ear Decomposition and estimation of Closeness Centrality.
- Extending graph library by adding SPQR-tree. These modules will be useful in for several graph problems such as Hamiltonian Cycle, travelling salesman problem etc. Project link

#### **UNIVERSITY OF VALENCIA | RESEARCH INTERN**

May-2017 to Feb-2018

- Finding the relation between twitter users and how they are connected like Location, topic, time etc
- Predict which topic can go viral and find which group is suitable for making it viral.

#### **INDIAN SCHOOL OF BUSINESS** | RESEARCH INTERN

Nov-2017 to March-2018 | Hyderabad

• Finding the effect on small stores if a popular store is shut down in a mall.

#### IIC TECHNOLOGIES & GOVERNMENT OF DELHI | QGIS DEVELOPER

Aug-2017 to Nov-2017 | Hyderabad

- Built a QGIS plugin which helps to understand the weather information, predicts it's trend and displays the interpolation.
- This plugin dropped down the cost from 25 Lakhs to NILL.

#### **IIIT - CHITTOOR** | TEACHING ASSISTANT

Aug-2014 to Dec-2016 | Sri City, Chittoor

• Worked as T.A for Algorithms, Math-I, Data Structures, Math-III, C Programming for UG students in IIIT-Chittoor for 5 Semesters.

#### **PROJECTS**

#### CROWD STEERING (MIT MEDIA LABS) | PYTHON DEVELOPER

July 2015- Sept 2015 | Nashik, India

- Worked on a real time framework built upon python and Amazon EC2 to do crowd analytics and predict flow of crowd using Heat-map.
- This project was completely funded and supported by MIT Labs.

#### **EFFICIENT EAR DECOMPOSITION ALGORITHM**

Jan. 2016 - Sep. 2016 | Sri City, Chittoor

- Breaking the time complexity of an existing algorithm of Ear Decomposition(an algorithm to find the Bi-connectivity of a graph.)
- Concluded with 2X Speed Up. It was published in DAM-2017 Journal, Germany.

#### APPLICATION FOR STOCK MARKET

Dec. 2016 - Jan. 2017 | Finsol Tech, Hyderabad

- Developed an application using socket programming which communicates with Shanghai Stock Market.
- Though this application market data will be viewed and orders can be placed and canceled with the delay of 5 nanoseconds.