

Sai Harrsha Gudupudi

+91 8500114747 | harsha99.g@gmail.com | [linkedin.com/in/harsha-gudupudi-63243416a](https://www.linkedin.com/in/harsha-gudupudi-63243416a) | github.com/harshavardhan-99

EDUCATION

Interational Institute of Information Technology

B.Tech + M.S in Building Sciences and Engineering, CGPA : 7.2

Hyderabad, India

Aug. 2016 – Present

EXPERIENCE

Undergraduate Student Researcher

Earthquake Engineering Research Center(EERC)

May. 2018 – Present

Hyderabad, India

- Working as an undergraduate student researcher at EERC.
- Published a paper on Optimization of 2D Frames for ductile behaviour against Seismic load (Using Swarm Optimization algorithm) in WCEE-2020. Developed a Program for optimization of RCC sections of 2D frames using Artificial Bee Colony optimization.

Teaching Assistant

IIT Hyderabad

Jan. 2020 – May. 2020

Hyderabad, India

- Worked as a Teaching Assistant for the course Multivariate Analysis for Spring Semester, 2020.
- Responsibilities included conducting weekly tutorials, holding doubt clearing sessions, grading quizzes and assignments.

PROJECTS

StoryGraphs: Visualizing Character Interactions as a Timeline | *Numpy, Python*

Mar. 2020

- Developed a novel way to automatically summarize and represent the story line of a TV episode by visualizing character interactions as a chart. The implementation mainly involves 3 stages Scene Detection, Face Detection and Graph Layout.

Wikipedia Search Engine | *Python*

Oct. 2019

- Built an optimised positional inverted index for a Wikipedia dump(75GB) using K-way merging.
- Ranked the relevant results for a query using a variant of tf-idf ranking strategy. Search engine supports field queries as well.

Course Portal Web Application | *Flask*

March. 2017

- Created a web application for a Course where TAs can automate some of their responsibilities like evaluating assignments.
- Used Flask framework to develop three classes for Students, Teaching Assistants and Course Head.

Game Development | *Python*

Sept. 2017

- Developed clones of popular games such as Bomberman using OOPS concepts in python
- The code was written in python without any external libraries or packages.

Face Recognition Classifier | *Python & Numpy*

Oct. 2018

- Created a Face Recognition classifier using basic concepts of PCA and Python libraries like Numpy, PIL . Implemented a Naive Bayes and Linear Classifier to evaluate the best model for recognition.

C Shell | *C*

Sep. 2017

- Developed a user-interactive shell in C, implementing the major features of GNU/Linux
- shell-like redirection, piping, and handling background processes.

SKILLS

Programming Languages: Python, C/C++, JavaScript, HTML/CSS, Matlab ,WebGL .

Frameworks and Developer Tools: Node.js, Flask, Git, Linux .

Selected Coursework: Statistical Methods in AI, Computer Vision, Data Analytics, Data Structures and Algorithms, IT Workshop, Multivariate Stastical Inference