

Sai Kamal Amuluru

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Education

International Institute Of Information Technology - Hyderabad <i>B.Tech in CSE (Hons. at Machine Learning Lab) - CGPA: 9.59</i>	Hyderabad 2016 - 2020
Sri Chaitanya Jr. College <i>Sr.Secondary - BIE, AP - Percentage: 98.00</i>	Visakhapatnam 2014 - 2016
Sri Chaitanya Vidyaniketan <i>Secondary Education, CBSE Board - CGPA: 10.00</i>	Visakhapatnam 2013 - 2014

Experience

Siemens Technolgy & Services Pvt. Ltd. <i>Research Intern</i> <ul style="list-style-type: none">WRITE ABOUT SIEMENS PROJECTExploring adjustable autonomy in human agent teams. The project is to implement a simple version of the meeting scheduling agent described in the "Towards Adjustable Autonomy for the Real World" research paper.	Bangalore, India May 2019 - July 2019
IIIT-Hyderabad <i>Honors project under Praveen Paruchuri, IIIT-Hyderabad</i> <ul style="list-style-type: none">Exploring adjustable autonomy in human agent teams. The project is to implement a simple version of the meeting scheduling agent described in the "Towards Adjustable Autonomy for the Real World" research paper.Approximate MDPs with Neural Nets. The project is to train a neural network to capture the implicit value function of a Markov Decision Process.	Hyderabad, India May 2018 - Present
Teaching Assistant <ul style="list-style-type: none"><i>Courses:</i> Operating Systems(Monsoon, 18), Artificial Intelligence(Spring, 19).The work included designing and evaluating projects and assignments, providing guidance to undergraduates and grading examinations.	Hyderabad, India
Statwig, T-Hub <i>Backend Developer</i> <ul style="list-style-type: none">Developed front-end for tracking a package in transit and back-end functionality for exchange of status update messages with a tracking device connected to a package.	Hyderabad, India Aug 2017 - Dec 2017

Projects

Custom SQL Engine <ul style="list-style-type: none">Custom SQL Engine built using python and sqlparser to replicate the functionality of MySQL with support for complex data queries.	<i>Monsoon, 2019</i>
Multi Chatroom Webapp <ul style="list-style-type: none">Developed a webapp, using Golang and concurrency, capable of supporting multiple chatrooms created on demand; where a user can participate in multiple chatrooms simultaneously.	<i>Spring, 2019</i>
Paraphrase Detection on Twitter <ul style="list-style-type: none">Given two tweets, predict whether they are paraphrases of each other.Developed RNN-based, Multi-layer Perceptron and Naive Bayes models to compare the similarity of two tweets by extracting features like cosine distance, word mover's distance and word-net similarity.	<i>Monsoon, 2018</i>

Simple Face Classification Model

Monsoon, 2018

- Developed a kernelized-SVM classifier model in python using PCA for dimensionality reduction on image pixel values as features.

Ultimate Tic-Tac-Toe AI Bot

Spring, 2018

- Developed an AI bot using mini-max algorithm with alpha-beta pruning and an effective heuristic function to find the next optimal move and win a 2D board of 16 smaller 4*4 boards.

Tunnel Rush

Spring, 2018

- A web version of the 3D game Tunnel Rush with lighting effects developed using WebGL and nodejs.

Proxy Server

Spring, 2018

- A flask and python based web app which plays videos from YouTube. The user can do CRUD operations on playlists and add videos to them using YouTube URLs.

3D Legend of Zelda game

Spring, 2018

- Developed a down scaled version of the Legend of Zelda game developed in C++ using OpenGL.

Interactive Shell

Monsoon, 2017

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

Bomberman

Monsoon, 2017

- Designed a variant of the classic Bomberman game using python with OOP principles and can be played directly on UNIX terminal.

Quiz App

Monsoon, 2017

- A state persistent quiz app with leader boards, different categories, etc developed using Ruby on Rails framework.

Video Gallery

Spring, 2017

- A flask and python based web app which plays videos from YouTube. The user can do CRUD operations on playlists and add videos to them using YouTube URLs.

Achievements

- Selected for **Dean's List of Academic Excellence** for all semesters awarded till date.
- Achieved 3rd place in **Megathon-2019-Qualcomm**(hackathon). Built a text similarity model on research papers' text and abstracts.
- Ranked **1147** among 14 lakh students in JEE Mains(263 marks out of 360).
- Ranked **2595** AIR in JEE Advanced.

Relevant Courses Taken

- **Core:** Data Analytics, Compilers, Database Systems, Natural Language Processing, Introduction to Game Theory, Statistical Methods in AI, Artificial Intelligence, Operating Systems, Algorithms, Data Structures, Computer System Organization, Structured System Analysis and Design, Computer Networks, Graphics.

Technical Skills

- **Languages:** C, C++, PYTHON, MATLAB, BASH, GOLANG, JAVASCRIPT.
- **Web:** DJANGO, HTML, CSS, NODEJS, FLASK, RUBY ON RAILS.
- **Other:** SQL, GIT, OPENGL, LINUX, TENSORFLOW-KERAS, PYTORCH.

Interests

- **Academic:** Machine Learning, NLP, Operating Systems, Data Analytics.
- **General:** Literature, Music, Photography.