# SIDDHANTH SATISH

### Amherst, MA

**८** <u>585-743-0240</u>
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### **EDUCATION**

### University of Massachusetts, Amherst

 $09\ 2019 - 05\ 2023$ 

BS Computer Science and Mathematics - CGPA - 3.6/4

Amherst, MA

### COURSEWORK

Machine Learning, Natural Language Processing, Artificial Intelligence, Mobile Health Sensing and Analytics, Computer Systems Principles, Programming Methodologies, Data Structures and Algorithms, Linear Algebra, Probability, Calculus.

### **EXPERIENCE**

# Manning College of Information and Computer Sciences

09 2021 - Present

Teaching Assistant

Amherst, MA

- Graded projects and provided feedback to students in the Introduction to Problem Solving with Java (CS 121) course.
- Helped 50+ students debug their code and clear their technical queries in the class discussion forum.

# Pioneer Valley Planning Commission (PVPC)

02 2021 - 05 2021

Software Developer

Springfield, MA

- Built full-stack web app that tracks metadata for internal software projects and provides visualization and analytics.
- Optimized administrative process by transforming their project database into a queryable, scalable, indexable format.
- Technologies Used: Balsamiq Wire framing, PostgreSQL, Python Flask, JavaScript, CSS, HTML5

# College Cabin Crew

08 2020 - Present

Founder

Chennai, India

- Directed an education consulting and mentor-matching non-profit organization which recruited 50 mentors to help over 80 Indian students to secure graduate and undergraduate admissions in programs spread across 8 countries and 30 majors.
- Executed customer centric quality control through in-depth call-evaluation and customer feedback analysis increasing our average customer satisfaction rating from 3/5 to 4.5/5 over a two month period.

### **PROJECTS**

## Headline Classifier Python Spacy, NLTK, Torch, Jupyter Notebooks

12 2021

- Built classification algorithms like Logistic Regression, Naive Bayes, SVM, and BERT to achieve best accuracy of 60%.
- Used confusion matrix of the best model to draw conclusions on which classes are misinterpreted the most.

### Hey That's My Fish! C | C

 $09\ 2021$ 

- Built a text based game called "Hey that's my fish" of one level with a human user and AI using C.
- Maintained the project with a MakeFile and tested and debugged the game in VIM.

## Connect 383 (Modified version of Connect 4) 🗷 | AI with Python

 $03\ 2021$ 

- Implemented a game playing agent for "Connect 383" that played against humans or other automated agents.
- Implemented min-max algorithm and alpha-beta pruning to recursively traverse the game tree and find value of states.

### Healthify | Python Numpy, SciPy, Matplotlib, Jupyter Notebooks

02 202

- Detected number of steps taken from iPhone's accelerometer data using a step-detection algorithm with 99% accuracy.
- Developed activity recognition classifier to identify user activity (cycling, walking, jumping, sitting) with 85% accuracy.
- Derived heart rate and breath rate from Photoplethysmography (PPG) signal using signal filtering techniques.

### 8 Puzzle Maze Solver 🗷 | AI with Python

02 2021

- Performed 4 Graph Searches Strategies (BFS, DFS, UCS, A\*) to solve the 8 Puzzle Problem.
- Implemented back-tracking to return the path taken by the algorithm.

### TECHNICAL SKILLS

Languages: Java, Python, SQL, NoSQL, C, C++, MATLAB, R, JavaScript, CSS, HTML.

Developer Tools: VS Code, Eclipse, Jupyter Notebooks, MS Office Suite, Google Apps

Technologies/Frameworks: PyTorch, Flask, Numpy, Pandas, SciPy, Matplotlib, Seaborn, scikit-learn, Linux, Git, GitHub, ReactJS, NodeJS, ExpressJS, MongoDB, Flutter