Sai Siddharth Cilamkoti

Buffalo - 14226, New York, USA
mobile : +1(716)808-4577 email : siddharthcilamkoti@gmail.com

Education

University at Buffalo, SUNY **Aug 2023 - Jun 2025**
Masters of Science in Computer Science and Engineering *Buffalo, NY, USA*

Amrita Vishwa Vidyapeetham **Jul 2019 - Aug 2023**
Bachelors of Technology in Computer Science Engineering with Artificial Intelligence; GPA: 8.80/10.0 *Amritapuri, Kerala*

Experience

Research Intern **May 2022 - Aug 2022**
INAI, IIIT-Hyderabad *Hyderabad, Telangana, India*

- Formulate and devise methods to improve the existing projects related to road safety and automation using Computer Vision and Deep Learning.
- Developed new methods and algorithms to enhance the pipeline's existing models by 15% to 20% in order to provide more reliable, accurate, and timely results.

Member and Mentor **Jan 2020 - Dec 2021**
amFOSS *Amritapuri, Kerala, India*

- amFOSS is the Free and Open Source Software club of my college, been an active member of the community since January 2020 till December 2021.
- Actively took part in all events conducted by the club and was also a part of the organizing team for multiple events hosted by amFOSS.
- Mentored juniors in getting exposed to various technologies and guided them to participate in many national and international hackathons, competitions.

Achievements

- Achieved first place at Lights, Camera, Hacktion Hackathon organized by MLH(Major League Hacking).
- Was awarded the best Hack in Educational track at hello:world by Cal Hacks team of UC Berkely.
- Achieved third place at New friends, New Hacks Hackathon organized by MLH(Major League Hacking).
- Accepted to attend the AI Singapore Summer School 2021. **Certificate**
- Selected for HackMIT 2021.
- Selected for Junction 2020 connected, which is Finland's largest Hackathon.
- Selected for Hack The North 2020, conducted by the University of Waterloo, Canada.

Projects

Early Plant Disease Detection | *Python, OpenAI* **Feb 2022**

- My Undergraduate project.
- Built an AI system that detects early plant diseases by analyzing leaf images and also gives out the severity of the disease using state-of-the-art computer vision techniques.
- Integrated a chatbot system using OpenAI's daVinci LLM to provide insights to the user about the disease and also give users information regarding the control and cure for the disease.
  View on Github

Review Analyzer | *Python, Flask, Azure Cognitive services* **Feb 2022**

- A web application that analyzes reviews of a product that you wish to purchase on amazon and gives a detailed sentiment and opinion analysis, along with graphical representation of the same.
- This application gives you additional information such as total rating of the product and the availability of the product.
- This application saves upto 50% of user's time while deciding whether to buy a product or not on amazon.
  View on Github

SafetyEye | *Python, OpenCV, OpenCV DNN* **Nov 2021**

- A computer vision based object detection model tuned to recognise human beings that helps to monitor social distancing in public places.
- This application uses the YOLO architecture to detect human beings accurately and monitor the distance between people.

- Developed a pipeline that is 10% more accurate than the traditional distance measuring algorithm on videos. The methodology used in this application is invariant to orientation of camera on the streets unlike most algorithms.
  View on Github

Covid-19 Resources Website | *Python, Flask, Tweepy.* **Oct 2020**

- A web application which has a functionality of displaying tweets regarding resources that are in need for people affected with the pandemic.
- The main aim of the project is to provide information about any useful resource for a person in need of it on one platform.
  View on Github

ASL Recogniser | *Python, Pytorch, OpenCV.* **Aug 2020**

- A deep learning project which can detect American Sign Language in a video and convert it to text.
- Using the transfer learning techniques, training a VGG-19 model was seemless and got an accuracy around 99%. This model works on real time input and displays the result on the window.
  View on Github

Publications

Robust and Scalable Network Monitoring System using Apache Spark **Mar 2022**

ICMISC 2022

- Proposed and built a prototype of a monitoring system with network proxy with scalable technologies like Kafka and Spark.
- Developed and contributed to a machine learning approach for determining the optimal geographical location of proxy server.

Technical Skills

Languages: Python, Java, SQL, C++
Developer Tools:Git, VS Code, Eclipse
Libraries: Flask, Pytorch, Tensorflow, Selenium, Django
OS: MacOS, Linux, Windows