

Sagnik Sarkar

A.I. | Machine Learning | Deep Learning | Computer Vision

Hyderabad, India

+91 7893540575

sagnik106@gmail.com

<https://sagnik.space/>

EDUCATION

Vellore Institute of Technology, Vellore — *B. Tech.*

JUNE 2018 - PRESENT

CGPA - 8.97

FIITJEE Junior College, Hyderabad — *Higher Secondary*

JUNE 2016 - APRIL 2018

State Board (MPC) - 96.2%

St. Joseph's Public School, Hyderabad — *Secondary*

JUNE 2005 - APRIL 2016

ICSE - 96%

EXPERIENCE

roboVITics, VIT, Vellore — *Technical Head (CSE)*

DECEMBER 2018 - PRESENT

Deep Polymers, Nagpur — *Intern*

JUNE 2020 - AUGUST 2020

PROJECTS

Face Generation GAN

A Generative Adversarial Network that generates a random face that does not exist.

AR Sudoku

Put up sudoku on the newspaper in front of the camera and see the answer pop up in its place.

Concrete Crack Detection

A project to efficiently detect concrete cracks by using Robert's filter to separate necessary features over unwanted ones.

COVID19 Viz.

Visualization of the trends of the COVID-19 pandemic and prediction of the upcoming trends using LSTMs and GRUs.

SKILLS

Machine Learning, Artificial Intelligence, Deep Learning, Computer Vision, Image Processing, Git, Arduino, Full Stack Web Developer, Robotics, Photoshop, Linux Shell Scripting, Premier Pro, Google Firebase.

PROGRAMMING LANGUAGES

Python 3, Java, C, C++, C#, R, GoLang, MATLAB, SQL, JS, Intel 8086 Assembly.

FRAMEWORKS

Tensorflow 2.0, Keras, PyTorch, Numpy, Pandas, Matplotlib, Plotly, OpenCV, Nvidia CUDA, SQL, Flask, HTML5, CSS, JQuery, PHP, NodeJS, Express, ReactJS, Docker, Selenium, Fusion 360, Blender, OpenMP, MPI.

GITHUB

<https://github.com/sagnik106/>

LINKEDIN

<https://linkedin.com/in/lesagnik-sarkar/>

LANGUAGES

English, Bengali (Mother Tongue), Hindi

Huntr

A war robot with a C-wedge design to reduce the opponent robot to scrap metal.

Baby Shield

A baby monitoring system primarily developed to prevent SIDS in newborn infants and raise an alarm in case any anomaly is detected.

Tutor AI

A platform to provide assistance in learning physically demanding tasks. It has been integrated with PoseNet to provide posture correction and feedback.

Visual Hertz

A platform to help the auditory impaired people attend classes that do not incorporate sign language.

Dental Play

A multi-discipline project to detect the distance between the nose tip and the chin to detect the amount of extra movement in the jaw in the elderly.

Fusion Kitchen

A website to help people stuck in quarantine prepare healthy food out of the ingredients that are available at their disposal.

Facial Emotion Detection

A Modified ResNet-152 architecture to detect the facial emotions of humans after finding a face in the image.

RESEARCH PAPERS

Genetically Optimized Prediction of Remaining Useful Life

Preprint arXiv - Sustainable Computing, SCOPUS

Clustering based Federated Learning using Genetic Optimization

Under review - Transactions on Network Science and Engineering, IEEE

ACHIEVEMENTS

Overall 2nd - UniHacks

Best Hardware Hack - YuHacks

Best use of Google Cloud -

SwampHacks

People's Choice 2nd - WinHacks