

Sandesh Katakam

BS-MS –Dual Degree – IISER Berhampur

[Academic Webpage](#) [GitHub](#) [LinkedIn](#)

Berhampur, Odisha

(+91) 7386306100

katakams20@iiserbpr.ac.in

EXPERIENCE

Research Intern, IISER Berhampur

March 2022 - PRESENT

I am currently a research intern in Dr.Vivek Tiwari's NeuroImaging: Brain Research group. I am working on generating an efficient masking model for segmenting brain tumors and classifying the tumor into ET(Enhancing tumor), WT(Whole Tumor), and TC(Tumor Core). I am also working on developing a contrast enhancement model using generative modeling to process the T1, T2, FLAIR modalities to generate an equivalent contrast-enhanced images like that of T1-c(using Gadolinium technique)

Machine Learning Blog writer,

NOVEMBER 2022 - PRESENT

I write blog posts on Machine learning and Deep Learning algorithms. and how to utilize the cutting edge techniques in Machine learning for Scientific Research. [Link to the Blog](#).

PROJECTS

Brain Tumor Segmentation Project — ongoing

I am currently working on Brain Tumor segmentation using U-Net and generating an effective mask for brain tumors. I am using the BraTS dataset from the BraTS Challenge. We reproduced the results from the paper “3D MRI BrainTumor Segmentation using Autoencoder regularization” by NVIDIA Labs. We are looking forward to using NeuralODEs for segmentation tasks.

Axis Bank Stock Data Analysis— Dec 2021

[Blog post of the project](#)

I worked on the stock quotes dataset of AXISBANK available from a NIFTY stock dataset from Kaggle. The project involved preprocessing the time-series data and handling missing values and visualizing the trend of the stock quotes during the years 2019-2021.

Mini-Projects List —

- [Comparing Neural Network architectures: EfficientBoNet Vs ResNet50.](#)
- [Higgs Dataset signal detection model](#)
- [Food Vision using Food101 Dataset](#)

EDUCATION

IISER Berhampur, Odisha – Bachelor of Science – Master of Science (BS-MS) Dual Degree

DECEMBER 2020 - PRESENT CPI: 8.8

FIITJEE Junior College, Hyderabad

12th - APRIL 2018 - APRIL 2019

SKILLS

• **Programming Languages:** Python, C/C++, Julia, MATLAB.
Frameworks: TensorFlow, Flux.jl, PyTorch, OpenCV.
Libraries: Qiskit, Scikit-learn, Pandas, Numpy, Matplotlib, etc.
Version Control : Git, GitHub, DevOps(CI/CD tools)
Web development : Jekyll, HTML, CSS, Django.
Other Skills: Latex, Linux, OOP(object-oriented programming), Data Structures, and Algorithms.

ACHIEVEMENTS

Qualified in JEE Advanced 2020.

MOOCs

- **Machine Learning** by Andrew Ng (Stanford University)
- **CS231n** by Stanford University
- **DeepLearning Specialization** by Andrew Ng (Stanford University)
- **TensorFlow: Zero to Mastery**