oham Chitnis

□ (+91) 9819765828 | sohamchitnis10@gmail.com | soham-chitnis10 | soham-chitnis

Summary _

Currently a Pre-final year student at Birla Institute of Technology and Science, K.K Birla Goa Campus pursuing Computer Science. I have worked on Computer Vision and Reinforcement Learning projects. I am looking to collaborate on Open-source and Research Projects.

Education

BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE

B.E(Hons.) In Computer Science, Minor in Data Science

Oct 2020 -Present

- CGPA 8.5/10
- Relevant Completed Coursework: Computer Programming, Linear Algebra, Probability and Statistics, Calculus, Object-Oriented Programming, Database Systems, Data Structures and Algorithms
- Teaching Assistant: Computer Programming

Projects

Comparative Study of Reward functions on Policy gradient

August 2021

CODE

• Conducted a comparative study on reward functions in Policy Gradient with Gaussian Distribution

Implementation of Super-Resolution ResNet(SRResNet) & **Super-Resolution CNN(SRCNN)**

March 2022

CODE

• This is an implementation of Image Super-Resolution Using Deep Convolutional Networks & Photo-Realistic Single Image Super-Resolution Using a Generative Adversarial Network

Bayesian Neural Network for Noisy XOR using Markov Chain Monte Carlo

March 2022

CODE

• Implemented Bayesian Neural Network using No-U-turn Sampler

Project Kratos

August 2021-Present

WEBSITE

- Building a Mars Rover for the University Rover Challenge (URC). Worked on Rock analysis using Computer
- Built a Computer Vision Model for detecting presence of life in rock samples

Adversarial Deep Learning

September - December 2021

CODE

• Worked as Contributor to this Project. This project is a part of a book being written of same name where this project involves tutorials and implementation for the book.

Research Experience

Central Electronics Engineering Research Institute (CSIR-CEERI)

Chennai, India

RESEARCH INTERN | CODE

May. 2022 - Present

- **Project:** Hyperspectral Imaging for polymer characterisation
- Developing deep learning classification techniques for Hyperspectral Images for plastic segregation to recycle. Conducting data pre-processing and benchmarking models
- · Supervisor: Dr. Madan Kumar Lakshmanan

Undergraduate Researcher | Code

Feb. 2022 - Present

- **Project:** Molecule Generation using Deep Graph Generators
- Generated Molecules using deep graph generators like Variational Graph Autoencoders
- Supervisor: Dr. Tirtharaj Dash

Certifications _____

2022	Deep Learning Specialization, DeepLearing.Al	Online
2022	CS231n-Convolutional Neural Networks for Visual Recognition, Stanford	Online
2022	Building Transformer-Based Natural Language Processing Applications, NVIDIA Deep Learning Institute	Online
2021	Machine Learning, Coursera	Online
2021	Fundamentals of Deep learning, NVIDIA Deep Learning Institute	Online

Skills____

- Languages: Python, C/C++, Java, Julia
- Toolkits: Numpy, Scipy, OpenCV, PyTorch, Tensorflow, Keras, Matplotlib, Pandas, Scikit-Learn

Honors & Awards _____

2021	Silver Prize, CTE ML Hackathon	Goa, India
2020	100 percentile, MHT-CET	Mumbai, India
2017	Silver Medal, Dr. Homi Bhabha Balvaidnyanik Competition	Mumbai, India

Committees _____

2022	Member , Society for Artificial Intelligence and Deep Learning	Goa, India
2021	Core Member, Electronics and Robotics Club	Goa, India
2021	Core Member, Life Detection, Project Kratos	Goa, India