

Soham Chitnis

LinkedIn | Website | sohamchitnis10@gmail.com | 9819765828 | GitHub

EDUCATION

BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI

B.E. (HONS.) IN COMPUTER SCIENCE
WITH MINOR IN DATA SCIENCE
June 2024
CGPA: 8.6/10

COURSEWORK

UNDERGRADUATE

Data Structures and Algorithms
Database Management System
Object Oriented Programming
Computer Programming

ONLINE

Deep Learning Specialization
Machine Learning by Stanford
CS231n: Deep Learning for
Computer Vision

SUMMER SCHOOLS

AI Summer School (Computer
Vision track), IIIT Hyderabad

SKILLS

PROGRAMMING

Python, C/C++, Java

FRAMEWORKS

Pytorch, Tensorflow/Keras

PYTHON LIBRARIES

Numpy, Scikit-Learn, OpenCV,
Pandas, Matplotlib

OTHERS

Linux programming, HTML, CSS

VOLUNTEER

Member, Society for AI & DL
Core Member, Electronics &
Robotics Club

TEACHING EXPERIENCE

Winter 2021 | Mentor -
Mathematics-I (Multivariate
Calculus)
Spring 2022 | Teaching Assistant
- Computer Programming
Summer 2022 | Instructor -
Introduction to Deep Learning

EXPERIENCE

APPCAIR, BITS PILANI | UNDERGRADUATE RESEARCH

COLLABORATOR

Feb 2022 - Present

MOLECULE GENERATION USING DEEP GRAPH GENERATORS

SUPERVISOR: DR. TIRTHARAJ DASH

Generated Molecular data using Graph Autoencoders and
Variational Graph Autoencoders using GCNs

CENTRAL ELECTRONICS ENGINEERING RESEARCH INSTITUTE (CSIR-CEERI) | RESEARCH INTERN

May 2022 - July 2022

HYPERSPECTRAL IMAGING FOR POLYMER CHARACTERIZATION IN PLASTIC
SEGREGATION

SUPERVISOR: DR. MADAN KUMAR LAKSHMANAN

Implemented Deep Learning models for Hyperspectral Images.
Built a data augmentation module and trained models using
self-supervised learning.

PROJECTS

SUPER-RESOLUTION CONVNET IMPLEMENTATION |

CODE

Implemented Super-Resolution CNNs & Super-Resolution ResNet
with an upsampling factor of 2 and experimented with interpolation
and upsampling methods: sub-pixel and transpose convolution.

PROJECT KRATOS | WEBSITE

Developing Mars Rover for the University Rover Challenge (URC). At
URC 2022, the team stood at 1st in India, 2nd in Asia and 20th
globally. Building an end-to-end Deep Learning model for
detecting the presence of life in rocks in real-time.

COMPARATIVE STUDY OF REWARD FUNCTIONS ON POLICY GRADIENT | CODE

Conducted a comparative study on different reward functions with
Policy gradient algorithm to find minima of quadratic function

ADVERSARIAL DEEP LEARNING | CODE

Worked as a Contributor on this project, added tutorials for the
implemented models for the book Adversarial Deep Learning

MLDATASETS.JL | CODE

Machine Learning datasets in Julia Language. Worked as
contributor to the project. Added PolBlogs Graph Dataset.

ACHIEVEMENTS

Maharashtra CET (MHT-CET) Percentile: 100 % (Overall), 100 % in
Mathematics in 2020

All India JEE ADVANCED 2020 Rank 3343

Dr. Homi Bhabha Balvaidayanik Exam: Silver Medal for project
Cultivation of Butterfly Garden for Conservation and Enhancement
of Biodiversity in 2017