Siddharth Nair

Email | LinkedIn | Github | Website

EXPERIENCE

TCS RESEARCH | Research Intern
May 2020 – Jul 2020 | India
- Review of deep learning methods for B-cell prediction and CDR structure prediction.
- Implementing recent sequence models and comparing with the existing methods.
- Analysing the use of attention and NLP mechanisms for protein-sequence prediction.

MOBILITY & OPTIMIZATION LAB | Undergraduate Researcher
May 2019 – Present | IIITD
- Collection of breakdown data of DTC cluster buses.
- Detection of breakdown solely using GPS data using clustering and thresholding methods.
- Estimation of the fuel wastage due to breakdowns.

PROJECTS

VOCO.AI | Course Project for Speech Recognition & Understanding
Jan 2020 – March 2020 | IIITD
- Lead the development of the Cycle-GAN based approach for non-parallel voice conversion.
- Deployed a web-app that converts voice samples using GAN's trained on 4 different datasets (includes inter gender voice conversion)

IMAGE COLORISATION | Course Project for Deep Learning
Feb 2020 – May 2020 | IIITD
- Created a GAN based method with a modified loss function to colorize images.
- Assisted in creating a CNN based model.

SNEK.IO | Course Project for Machine Learning
Sep 2019 – Dec 2019 | IIITD
- **AIcrowd challenge** for snake species identification.
- Created metrics regarding data and developed a densenet model for identification.

ROAD MONITORING SYSTEM | Course Project for Introduction to Engineering Design
Feb 2018 – May 2018 | IIITD
- Detecting the road conditions using 3-axis gyroscopes.
- Measuring vehicle density on roads accurately using RFID's and displaying these data as a heatmap.

EDUCATION

INDRAPRASTHA INSTITUTE OF INFORMATION TECHNOLOGY
Btech in Electronics and Communication
Jul 2017 - May 2021
Delhi, India
Cum. GPA: 7.95 / 10.0

SKILLS

PROGRAMMING
3+ years:
Python • C++
1+ years:
SQL • Matlab • Bash
0+ years:
Go • Java

TECHNOLOGY
Git/Github • Machine/Deep Learning • Linux • Vim • Pytorch • Web Scraping

COURSEWORK

Deep Learning
Speech Recognition & Understanding
Machine Learning
Math I-II
Data Structures & Algorithms
Probability & Statistics
Linear Algebra

RESPONSIBILITIES

Student Mentor
Mentoring freshmen and helping with their academic/social issues.
UAV-IIITD
Autopilot and Computer Vision team.
Placement Committee
Placement representative for the ECE branch.

ACHIEVEMENTS

6th position at the 17th annual AUVSI SUAS competition 2019 out of 75 international teams