VIGHNESH **N GANESH**

7, 5th Street, B.V. Nagar, Adyar, Chennai, INDIA 600020 (+91) 8939575774

f20190131@pilani.bits-pilani.ac.in

DOB: 17/02/2002

Goldman Sachs Summer Analyst, 2022 | Visiting Researcher, UK Energy Markets, London Business School | Data Science for Social Good Fellow – University of Warwick UK | ML Lead, Student Ambassadors of Microsoft Learn

B.E. in Computer Science with a Minor in Finance

2019-2023

Birla Institute of Technology and Science, Pilani – Pilani Campus

Experience

Incoming Visiting Researcher / London Business School

Aug-Dec 2022

Invited to model short-term energy markets in the UK and develop a trading algorithm.

Data Science for Social Good Fellow (DSSGx) / University of Warwick, UK

Summer 2021

- Worked with The Federal Ministry for Economic Affairs and Energy of Germany.
- Halved the mean squared errors (to 0.164) of unemployment rate forecasts.
- Authored a chapter in the textbook: "Neue Dimensionen in Data Science", launch at Kunstmuseum, Germany Sep 2022.
- Developed multiple models (SARIMAX, VAR, deep neural networks) and incorporated auto machine learning in Python.
- Worked on Streamlit to build an application to deploy the model with adequate abstraction for use by economists.

Data Science Intern / LuMos, Silicon Valley (Social Media Startup)

Summer 2020

- Generated the trending statistics from the posts of users and fed into the media recommendation engine.
- Challenges Addressed: i) ORB algorithm's focus on texts. Solved by tuning the edge threshold parameters. ii) Misclassification of grainy images. Refined the distribution of generated key points using confidence thresholding.
- It successfully classified all (10000+) posts on the platform into 20+ unsupervised classes demystify distribution of the content.

Summer Analyst 2022 / Goldman Sachs

Summer 2022

- Ideated and organized the event that recorded the highest participation in the All-India Goldman Sachs Hackathon.
- Created new orchestrations, that will process billions of dollars in personal loans with better scalability.
- Minimized client loss by developing a command to restart the loan applications that fail due to production issues.

Machine Learning Lead of Microsoft Ambassadors / Microsoft Learn Student Partners

Aug 2021-Apr 2022

- Led a team of 20 ambassadors for a year as their ML Lead to create open-source projects and learning pathways.
- Designed and Evaluated Multiple different Data Science projects used to select new members.
- Conducted a workshop with Microsoft employees to teach BITS students about ML on Cloud with Microsoft Azure.

Research Projects

Image Domain Translation using GANs / Deep Learning

- Adopted different GAN architectures to translate RGB images into HSI hyperspectral images to use in security and self-driving solutions.
- Developed novel architecture with 100 million+ parameters and trained on gigabytes of data in a remote server using Python on Linux.

Correlation Carbon Dioxide Emissions to Green Cover / Computer Vision and Satellite Data Processing

- Calculated Time Series CO₂ density data from NASA's OCO-2 data for 5000+ Landsat satellite data files.
- Inferred correlations between density of CO₂ with the green cover of countries using Python presented in Jupyter Notebooks.

Positions of Responsibility

President / Safety and Medical Advisory Council, BITS Pilani

- Led a team of 4 programmers and 2 writers to create a blog site: Website Link, and Coordinated 3 first Aid and a Stem cell Registry camp. Vice President of Membership / Toastmasters, BITS Pilani
 - Quadrupled number of women members in the club to win the Triple Crown and Magical Leader award from District 41 of Toastmasters.

Certifications

Neural Networks and Deep Learning / Coursera

Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization / Coursera

Structuring Machine Learning Projects / Coursera

Sequence Models / Coursera

Introduction to Data Science in Python / Coursera

Convolutional Neural Networks / Coursera