SOHAN ANGELO

Data Analyst

SOHAN.ANGELO@GMAIL.COM

Center for Brain Research, Indian Institute of Science Campus CV Raman Avenue Bangalore 560012

Indian he/him linkedin.com/in/sohan-anthony-a6355a126 github.com/Angelo2701

https://orcid.org/0009-0006-5343-5472

Profile

I'm a researcher at the **Center for Brain Research, IISc Bangalore,** fascinated by genetics. I explore how DNA variations influence health and disease. When not deep in data, you'll find me running around campus or missing shots on the basketball court!

Education

B.Tech., *Manipal Institute of Technology* 09/2023

Manipal, India

I hold a degree in **Mechatronics Engineering** with a minor in **mathematics**, where I delved into topics like **linear algebra** and **bayesian statistics.**

Projects

Genome India 04/2024 – present

As part of the **Genome India project**, I'm investigating genetic variations in **Long Non-Coding regions** across diverse **ethnic groups in India**. This research aims to uncover how these regions contribute to genetic diversity and influence disease susceptibility. By focusing on underexplored segments of the genome, I seek to provide insights into India's unique genetic landscape.

Tata Longitudinal Study of Aging (TLSA) 04/2024 – present

In the **TLSA**, I analyze **genetic variants across the entire genome** to study their association with **cognitive decline**. By leveraging longitudinal data, I explore how genetic factors may impact cognitive aging, helping to better understand the genetic underpinnings of cognitive health in aging populations.

Expression levels of Long Non-Coding RNA 08/2024 – present

In this project, I use **Gaussian Process Regression (GPR)** to predict the **expression levels of Long Non-Coding RNAs (lncRNAs)** based on **Differential Gene Expression (DGE) data** from studies on conditions like **alzheimer's disease and controls**. By integrating these models with expression profiles of known genes, I aim to unravel the regulatory networks that drive lncRNA expression in disease contexts.

Predicting Aircraft Engine Life 01/2023 – 09/2023

I utilized the **NASA Turbofan Jet Engine data set** from **Kaggle** to develop a model combining **Fuzzy Neural Networks** and **Gaussian Process Regression (GPR)** for predicting the **Remaining Useful Life (RUL) of aircraft engines**. This approach leveraged sensor data to accurately estimate engine degradation, providing insights into maintenance scheduling and reliability enhancement.

Professional Experience

Data Analyst, *Center for Brain Research* 03/2024 – present
I contribute to the **Genome India** and **Tata Longitudinal Study of Aging** projects. Bangalore, India

Project Intern, *Center for Brain Research* 11/2023 – 03/2024
I analyzed the **2MB Region of the APOE gene** in the **Indian population**, investigating genetic variations. Bangalore, India

Deputy Manager, *ICICI Bank* 08/2022 – 07/2023
I worked on the **Search Engine Optimisation (SEO)** for the **ICICI Bank** website. Hyderabad, India

Student Intern, *Blackfrog* 01/2020 – 05/2020
Worked on the development of the **wireless communication** system for a **vaccine carrier.** Manipal, India