# Himanshu

Roll No.: 252CD007
M.Tech - Computational Data Science
National Institute Of Technology Karnataka, Surathkal

+91-8178065589
officialhimanshu163@gmail.com
Website
Github | LinkedIn

## EDUCATION

| Degree/Certificate | Institute/Board | CGPA/Percentage | Year |
|---|---|---|---|
| M.Tech. Computational Data Science | NIT Karnataka | 8.95 | 2025–Present |
| M.Sc. Astronomy | IIT Indore | 8.39 | 2019–2021 |
| B.Tech. Engineering Physics(Major: Electronics, Minor: Robotics) | DTU Delhi | 7.69 | 2014–2018 |

## RESEARCH EXPERIENCE

•**Master's Research: Studying Galaxy Clusters via Sunyaev–Zel'dovich Effect** *2019–2021*

*Research Scholar(M.Sc. Thesis)* IIT Indore

– Carried out data analysis, image processing, and modeling of galaxy clusters using Monte Carlo methods.
– Simulated SZ images with experimental and theoretical modeling using Python & C++.
– Conducted MCMC analysis of simulated and observed data showing strong agreement.

•**Industrial Internship** *Jun–Jul 2017*

*Intern* Central Electronics Limited, UP

– Worked on testing piezoelectric elements for quality control.
– Analyzed constants and capacitance for product validation.

## PROJECTS

•**Time Series Analysis and Forecasting COVID-19 Data**

*Python, ARIMA Modelling* GitHub

– Predicted COVID-19 cases using ARIMA, achieving forecasts within 95% CI.

•**Hamiltonian Monte Carlo for Parameter Estimation**

*Python, Research Implementation* GitHub

– Implemented HMC on supernova Ia data achieving ∼70% chain acceptance; GR convergence ratio ∼0.96.

•**Importance Sampling for Cosmological Parameters**

*Python* GitHub

– Achieved ∼88% acceptance rate on supernova Ia data.

## TECHNICAL SKILLS

• **Languages**: Python, C++, C, SQL, JavaScript
• **Technologies**: Azure, TensorFlow, PyTorch, TensorRT, Tableau, Power BI

## KEY COURSES TAKEN

• **Core Courses (M.Tech)**: Introduction to Scalable Systems, Introduction to Data Science, Machine Learning Algorithms, Data Structures and Algorithms

## ACHIEVEMENTS & CERTIFICATIONS

•**Microsoft Certified: Azure Data Scientist Associate**, Microsoft *2025*
•**Poster Presentation**, Astronomical Society of India *2021*

## LANGUAGES

• **English**: C1 Proficiency
• **Hindi**: Native Speaker