VISHAL GAUR

Indian Institute of Science Education and Research, Mohali

https://github.com/vishalgaur49 https://vishalgaur49.github.io/

in https://linkedin.com/in/vishal-gaur-4398b719a

EDUCATION

BS-MS Dual degree, CPI- 8.30/10 Major - Physics, Minor - Data Science

Indian Institute of Science Education and Research, Mohali

Higher Secondary (CBSE) - 93.2%

Delhi Public School, NTPC, Dadri, U.P

2015

Secondary (CBSE) - CPI- 9.0

Delhi Public School, NTPC, Dadri, U.P.

2013

RESEARCH WORK

Junior Research Fellow, IISER-M

 Computational Astrophysics: A detailed analytical study of theoretical and observational aspects of Ultra-Compact X-ray Binaries.

MS Dissertation, IISER-M

 High Energy Astrophysics: Study of X-ray binaries using large datasets obtained from several X-ray observatories.

Summer Research Intern, IISER-M

May 2017-July 2020

♥ Mohali, Bangalore, Pune

 Radio, Optical, UV, and X-ray data analysis: Studied the basic aspects of investigative research and used a variety of mathematical tools, softwares, and programming languages to analyse the astronomical datasets.

*For details, visit my webpage (link at the top).

TECHNICAL SKILLS

- Python, C++, Bash scripting, IDL, MATLAB, GNU plot, Mathematica.
- Used data from NICER, NuSTAR, Swift (XRT, UVOT), and AstroSat (LAXPC, SXT, UVIT) missions in my projects.
- SAOImage DS9, SExtractor, HEASOFT, Hendrics, IRAF, and Starlink Period program.

SCHOLASTIC ACHIEVEMENTS

- TOEFL iBT Score: 102/120 (Reading-28, Listening-27, Speaking-25, Writing-22)
- Cleared CSIR-UGC NET(National Eligibility Test)
 For Junior Research Fellowship (JRF)
- 2019-2021 The Astronomy Club, IISERM.
- 2016-2021 Inspire Scholarship Holder, DST, Govt. of India
- 2013-2015 Scholar badge holder in School, Delhi Public School.

EXTRA-CURRICULAR ACTIVITIES

- Won hackathons at IISER-M and IIT-Mandi.
- Organised Astronomy events and camps at IISER-M.
- Organised Robotics and Electronics workshops.
- Playing badminton, music.
- Making/Designing recreational electronics circuit

DATA SCIENCE PROJECTS

- News Articles Recommender System.
- IBM HR Analytics Employee Attrition Classification.
- Frame level speech recognition system.
- MNIST handwritten digit classification using neural network.
- Stock market predictor model using Machine learning.
- *For details, visit my webpage (link at the top).

RELEVANT COURSES

- Classical+Quantum Mechanics
- · Electrodynamics.
- Statistical Physics.
- Nuclear and Particle physics
- Advanced Astronomy and Astrophysics
- Computational and Numerical Methods
- Mathematical Methods for Physicists
- Data Sciences