

Asad Arshad

Astrophysicist & Programmer

About me

An inquisitive, ambitious and creative student, with a passion of learning, always seeking new ways to understand the cosmos, while experiencing and enjoying the world of science, research and technology, as well as have *fun*.

Personal

Gender: Male
Nationality: Pakistani
circa 2002 AD

Areas of specialization

- Astrophysics
- Scientific Research
- Exoplanetary Science
- GIS & Remote Sensing
- Programming
- Scientific & Fictional Writing

Interests

Reading, Writing,
Programming, Cycling
and Listening to the Music
during all these.

Application Softwares

- Jupyter Notebooks
- Visual Studio Code
 - FITS Liberator
 - Microsoft Office
- ArcGIS Pro & Desktop
 - QGIS
- Google Earth Engine & Google Earth Pro
 - Stellarium

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Asad Arshad

def_fun

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My Portfolio

ON GOING PROJECTS

2025–Pre

Down the Black Hole: A wobbly web experience

LEAD · HTML, CSS, JS

As for my Bachelors final year project, I along with a friend, are currently designing a webpage that will contain information, articles, current research, illustrations from across the web, links as well as basic help to navigate data regarding BHs from sources like NASA and the things we learn as we venture in this rabbit hole.



DEGREES

2019–21

Intermediate

F. Sc (PRE ENG) [A+] ·
Govt. College Township



2021–25

Bachelors

SPACE SCIENCES [3.86] ·
Dept. of Space Science
University of The Punjab



PROGRAMMING

python



javascript



html, css



L^AT_EX



(L^AT_EX compiled on January 5, 2025)

PAST WORK

2024

Studying the effects of ENSO on Moonsoon in Pakistan

THOUGHT LEADER · Google Earth Engine

Our aim was to use EE datasets to calculate **Oceanic Nino Index (ONI)** and **Standardized Precepitation Index (SPI)** to see how the rainfall in moonsoon season in Punjab, Pakistan is effected by El Nino and La Nina.



2024

QSOs Spectra and Virial BH masses on SDSS

SOLO · SciServer

In this little side project, I explored the vast dataset on Spectra of QSOs through python as well as performed some stats on the BH mass dataset from **Vizier**.



2023

Exoplanets around "TRAPPIST-1" through "KEPLER"

LEAD · FITS Liberator & MAST

Analysing the Light curves of "TRAPPIST-1" that we made using the "Transit data" from **Kepler Mission** and **K2** and studied the orientation and general planetary parametes of the planets in TRAPPIST system.



POSITIONS HELD

2024

Summer Internship at
PMD, HQ, Islamabad

2024

Dr. Khalid's assistant in
SARNET course

PROGRAMS

2024

ONI using OISST v2.1 dataset,
Google Earth Engine.

2024

Orbits & Keplerian Elements in
Python, Google Colab.

LANGUAGES

Urdu

C2

mother tongue

English

C2



WRITINGS

Aug. 2021

"Would you like an
Omelete?".