SAHIL JHAWAR

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INTRODUCTION

A postgraduate student with scientific training and temperament. Gained valuable experience while working on research projects that demand sound analytical and problem solving skills, adaptability and sound understanding of programming, Physics and Mathematics. I look at things scientifically and make sure that I learn everything about it. I like to know about new technologies and the way they function.

EDUCATION

Universität Potsdam, Potsdam

October 2021 - Present

Master of Science in Astrophysics

Coursework:

- Gravitational Wave Astrophysics
- Atomic Spectroscopy
- Computational Astrophysics
- General Relativity
- Stellar Evolution
- Bayesian Inference
- Multi-messenger astronomy
- Galactic Dynamics
- Statistics

Christ (Deemed to be University), Bengaluru

2018-2021

Bachelor of Science (Physics, Maths and Electronics)

GPA: 3.68/4.0

Final Year Project: Gesture Controlled System based on Raspberry Pi Pico

WORK

Theoretical Astrophysics Group

March 2023 - Present

Master's Thesis

Universität Potsdam, Potsdam

Master's thesis student under **Prof. Dr. Tim Dietrich**. Working on using Bayesian techniques for Multi Messenger Astronomy using *NMMA*.

4-MOST

December 2022 - Present

Student Assistant

Leibniz-Institut für Astrophysik Potsdam (AIP), Potsdam

Student Assistant in the Project Management team for building (integration, installation and maintenance) the 4-metre Multi-Object Spectroscopic Telescope (4MOST).

- Utilized technical skills in troubleshooting and problem-solving within the specialized environment of an astronomical integration hall.
- Proactively managed procurement activities, liaising with vendors to procure essential largescale items for the integration hall, ensuring timely delivery while adhering to budget constraints.
- Engaged in data analysis, providing insights to the telescope detectors

PROJECTS

Research workshop on evolved stars

August 2022 - September 2022

Participant University of Potsdam & Astronomical Institute of CAS, Prague Created a target list of handful of stars from a catalogue of few hundred thousand stars and obtained spectras using Perek 2m telescope at Ondřejov Observatory. Data reduction and analysis was done using IRAF and visualised through Python.

Radio Astronomy Winter School 2020

Winter Student

December 2020 - January 2021 IUCAA & NCRA-TIFR. Pune

Learned basics of radio astronomy and its instrumentation and computational field. Also worked on few physical experiments and worked on GMRT and ORT data using Python.

Detailed reports can be found here

Krittika

May 2020 - August 2020

Summer Project Intern

IIT Bombay, India

Developed a Python package to analyse various types of binary star system.

EXPERIENCE

Let's Talk Astronomy, Christ

November 2019 - January 2021

 $Student\ coordinator$

Bengaluru, India

Acted as a liaison between students and faculty. Conducted 15+ talks.

LIGO-India, Vigyan Samagam (DAE-DST-NCSM, G.O.I)

September - December 2019

Scientific Communicator

Bengaluru and Kolkata

Successfully played a role of science communicator by explaining GW Science and GW Exhibits to the audience of all ages. Catered to nearly 500 visitors

Astronomical Society of India

February 2019

Volunteer

Bengaluru, India

Worked with hospitality committee to cater to all needs of guests and help in the smooth running of the conference during the 37^{th} Annual Meeting of ASI at Christ (Deemed to be University).

SKILLS

Technical

Python, C\C++, TOPCAT, LATEX, Git, Unix based OS and Windows, MS Office

Personal

Critical thinking, Problem solving, Leadership, Research and Analysis

Language English and Hindi

CERTIFICATIONS/MOOCS

Light and Beyond (2020)

ICTS, Bengaluru

Astronomy and Astrophysics (2019)

MPBIFR, Bengaluru

CO-CURRICULAR ACTIVITIES

POSITIONS OF RESPONSIBILITY

Student Coordinator of Mathematics Association, Christ

Student Coordinator of Sequence 2021, Christ

Student Coordinator of Event Horizon 2021, Christ

Head of Events Core Committee for Sequence 2020, Christ

Event Head in Eureka 2019, Christ