

PRASHANT KUMAR BARNWAL

Indian Institute of Technology, Jodhpur

@ barnwal.1@iitj.ac.in

☎ (+91) 8340492681

in linkedin.com/in/prashant-barnwal-108565245

🔗 github.com/prashant10021999



MASTER'S THESIS

Design of Soliel Babinet Compensator

Quantum Optics Lab Under the Supervision Of Dr V. Narayanan

📅 Jan 2023 - Jun. 2023

📍 IIT-Jodhpur

- Developed a device technology that will produce the Mueller matrix for the variable-path optical wave plate.
- Technology used: Python and OOPs.

Polarization studies of the Nanostructures

Quantum Optics Lab Under the Supervision Of Dr V. Narayanan and Dr. Ravi K.R

📅 July 2024 - Present

📍 IIT-JOdhpur

- works as an Experimentalist and uses Mueller matrix Polarimetry to study the polarization effect of nanomaterials manufactured under Laser-based Additive processes.

PROJECTS

Developed a Monte Carlo method for the study of the transmission of polarized light

Under Dr V. Narayanan

📅 April 2024 - August 2024

- Monte Carlo simulation: Optimization technique used for light Scattering Turbid media and found its Mueller matrix.

Design of HelioStat with 8 mirrors system

Course Project

📅 Jan 2023 - May 2023

- Using 3D Optix software, developed an 8-mirror heliostats system, simulated the propagation of the light rays and found the final achieving temperature of the system.

Handwritten Word recognition system

Self-Exploratory Project

📅 July 2023 - December 2023

- Two methods were adopted for building the classifier. In the first, words are vectorized using frequency count and CNN was used.

ML-Model-Datasets-Using-Streamlits

Self-Exploratory Project

📅 July 2023 - December 2023

- Developed a dynamic web application using Streamlit where users can interactively apply multiple supervised learning algorithms to various datasets.

M.Tech.(Mat.Science) ॥ त्वं ज्ञानमयो विज्ञानमयोऽसि ॥

IIT-Jodhpur

📅 July 2023 - Present

CGPA:7.4

M.Sc.(Physics)

IIT-Jodhpur

📅 July 2021 - Aug2023

CGPA:7.7

B.Sc(Physics)

St. Xavier College Ranchi

📅 July 2017 - Dec2020

CGPA:7.25

Class XII

Doon Public school Dhanbad

📅 June 2017

70.2%

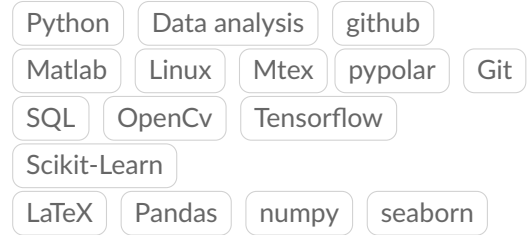
Class X

DAV Public School Dhori

📅 June 2014

CGPA:9.8

SKILLS



COURSEWORK

- Computer-vision
- Machine Learning for economics
- optics for solar cell
- Computational Physics and thermodynamics

POSITION OF RESPONSIBILITY

- Student well committee - This is the group responsible for the events that is happening in the college and I served as student guide there .

ACHIEVEMENTS

- Qualified all India Level exam IIT-JAM 2021 and have AIR 673
- Qualified all India Level exam Gate 2024.