

BASIC INFORMATION

Portfolio Website : <https://krishydesigns.co.in/>

Email : krishnavidhiprasad@gmail.com.

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VISION

Innovate artistic solutions for a eudaimonic world, centred on the wellness of body, mind and humanity.

EDUCATION

R.V College of Engineering (RVCE) India

Bachelor of Engineering Aerospace

2022 - 2026

RESEARCH EXPERIENCE

1. Center for Fundamental Research and Creative Education (CFRCE) India

Research Student

April 2024 - present

Conducting research on plasma dynamics and general relativity, building “Antarés” - kinetic installation that combines design, electronics and applied physics.

Authored and published three preprint review articles to Zenodo.

Continuing to explore special theory of relativity to better create designs for spatial architecture.

Mentor : Ms. Charu Gupta

Supervisor : Dr. BS Ramachandra

2. Raman Research Institute India

Research Intern

2025.1 - 2025.11

Analysed efficiency of radio wave propagation from ground based systems for astronomical observations, worked with real observational data.

Conducted signal analysis to optimise detection parameters for radio astronomy applications in Python script.

Mentor & Supervisor : Prof. Mayuri R.

INTERNATIONAL RESEARCH EXPERIENCE

3. Università degli Studi di Bari Aldo Moro - Department of Physics Italy

CMS x Bari Traineeship in G.E.M Laboratory

2025.9 - 2025.10

Assisted Dr. Piet Verwilligen, in building G.E.M (Gaseous Electron Multiplier) detector board for CERN's CMS experiment.

Performed QC3 and QC4 experimental analyses in Python script to ensure detector quality standards, adhering to the strict testing protocols and documentation requirements.

Collaborated with international research team and acquired practical skills in detector testing, data acquisition and analysis techniques.

Gained foundational understanding of particle detector technologies used in high physics energy experiments and understood the role of detectors in current and future collider experiments.

Mentors : Research Asst. Profs. Federica Simone and Antonello Pellecchia

Supervisor : Prof. Anna Colaleo.

INDUSTRIAL EXPERIENCE

4. Rossell Techsys India

Student Intern

2023.11 - 2023.12

Completed intensive 3 day rotation across six departments (Quality, Manufacturing, Product and Process Engineering, R&D and Planning) at Aerospace manufacturing company.

Observed and gained insight on product development life cycle and interdisciplinary collaboration.

Supervisor : COO Zeena Philip

PUBLICATIONS AND CONFERENCES

Focusing on interdisciplinary research of Applied physics, Engineering, Biology and Interactive design. Published **3 articles** to scientific website. And **2** upcoming Research papers.

1. **Vidhi Prasad, K., & Gupta, C.** (2025). Magnetohydrodynamic Processes in Solar Corona : An investigation of the explosive energy release mechanisms. Zenodo. <https://doi.org/10.5281/zenodo.17587728>

CFRCE outcome.

2. **Vidhi Prasad, K., & Gupta, C.** (2025). Engineering of the Parker Solar Probe : An Investigation of the Explosive Release Mechanism. Zenodo. <https://doi.org/10.5281/zenodo.17593664>

CFRCE outcome.

3. **Vidhi Prasad, K., & Gupta, C.** (2025). Relativistic Plasma Dynamics and its origin from the magnetic reconnection of Solar Flares. Zenodo. <https://doi.org/10.5281/zenodo.17593764>

CFRCE outcome.

4. **Krishna Vidhi Prasad**, Deeksha Rao, Spoorti Anil, Shradha Anand, AH Reddy (2025). Machine learning based prediction of Anti Cancer Peptides. *In IEEE CSITSS 2025, Bangalore, India.* <https://ieeexplore.ieee.org/document/11295531>

5. **Krishna Vidhi Prasad**, Sindhu Rajendran, Vibhav Simha, G. Skanda, T. Dheeraj, Harshitha B., TSK Sree (2025). Leveraging Machine Learning for Simulator Pilot Training. *In IEEE CSITSS 2025, Bangalore, India.* <https://ieeexplore.ieee.org/document/11294825>

LANGUAGES

1. English - Full proficiency

IELTS Overall Score - 7.5

2. Hindi - Full proficiency

3. Malayalam - Native proficiency

TECHNICAL SKILLS

Programming languages - Python, MATLAB & C.

Design and Simulation software - Solid works, Autodesk Fusion, ANSYS & APDL

LEADERSHIP AND VOLUNTEERING

1. **dhRuVa Astrophysics College Club, RVCE** - Research head, Captain 2024.2 - 2025.4

Led the research division to compete in GLEX 2024 with abstract being selected to the final round and published two articles in scientific website - *Shaastrasnehi*.

Led Data Driven Astronomy (DDA), Radio, Optical and Research divisions; established outreach division to make astronomy more accessible to government schools in Bangalore.

Organised hackathons and stargazing events; reaching 100+ students.

2. **St. Broseph** Bangalore, India - Student Volunteer

2025.1 - 2025.2

Taught mathematics and Social Science to grade 9 public school students.

3. **Children's Movement for Civic Awareness (C.M.C.A)** India - Student Volunteer

2017

Learnt about social responsibilities and took initiative to help stray dogs get vaccinated.

OTHER EXPERIENCES & AWARDS

1. Karate - Black Belt (1st DAN) 2014 - 2019

Won Silver medal in Kata at the 1st National Level Open Karate Championship in 2017.

2. Indian Classical Dance student - Bharatanatyam. 2017 - present

3. Indian Classical Music student - Carnatic. 2008 - present

4. Equestrian - Grade 2. 2022 - present