Aryan Bhatia

aryanbhatia21@iisertvm.ac.in
https://idontknow700.github.io/mywebsite/index.html
https://github.com/idontknow700
+91-911133952

Education

- BS-MS program, Indian Institute of Science Education and Research (IISER) TVM (CGPA: 8.15/10.0)
- Delhi Public School (DPS), Bhopal
  - 12th Board Exam (CBSE) - 96 % (*2021*)
  - 10th Board Exam (CBSE) - 94.4 % (*2019*)

Research and Internship Experience

- Summer Research Intern, *Dr Srijit Bhattacharjee*, *Physics*, IIIT ALLAHABAD *(5/23 - 7/23)*
  - Undertook an in-depth study of special relativity at an intermediate level and gained a foundational understanding of general relativity at an introductory level.
  - Made visually appealing explanation of the Lorentz transformation using the python based animation engine Manim
  - Wrote a report on the explanation of Twin Paradox in the traditional way and a non-conventional way using the equivalence principle.
- Research Intern, *Dr Nagaiah Chamakuri*, *Mathematics*, IISER TVM *(8/22 - 11/22)*
  - Assisted in the development of numerical solutions for partial differential equations using *DUNE (https://www.dune-project.org)*
  - Learned advanced C++ techniques such as Template Meta-Programming during an internship to optimize performance-critical sections of code.

Skills

- **Programming Languages:**
  - Proficient in Python programming language with experience developing and implementing algorithms for data analysis, and skilled in using popular Python libraries such as *NumPy, Pandas, and SciPy.*
  - Intermediate understanding of C++ programming language, including object-oriented programming concepts and standard library usage
  - Completed a comprehensive machine learning course offered by NPTEL on their YouTube channel, helping to grasp the basics of the field.

  - Intermediate knowledge of LaTeX for document typesetting and formatting

- **Design Software:** Proficient in using design software such as Adobe Illustrator, After Effects, and Photoshop to create vector graphics, motion graphics, and photo editing tasks, which can be utilized to develop compelling visual aids for research presentations.

Organisation & Leadership

- President, Club *of* Mathematics (CMIT), Indian Institute of Science Education and Research (IISER) *(12/22 - Present)*
  - Head of Website *(5/22 - Present)* - Design and maintain the club website (`https://cmit.iisertvm.ac.in`), and create graphics and visual content for the club's social media pages
  - Organized and facilitated outreach programs and workshops as a member of the club. Collaborated with team members to develop and implement engaging and informative events for participants, with a focus on Mathematics.
- Director, (c)ypher Tech Club, Delhi Public School (DPS), Bhopal (*8/20 - 11/21*)
  - Organized and hosted an international tech event with 2000+ participants, managing logistics, budgeting, and communication with participants and vendors.
  - Led a team of 60+ volunteers in planning and executing club activities, including hackathons, coding competitions and various other events.
- Contributed to the development of the Physics Club of IISER TVM website (`https://students.iisertvm.ac.in/psit/`) by designing an interactive background using the Three.js library, which was seamlessly integrated with the overall website design through collaboration with a team of developers. Utilized JavaScript, HTML, and CSS to create dynamic and engaging user experiences.
- Assisted in the organization of *Anvesha*, the annual science fest of IISER TVM, by designing and coordinating various projects for clubs. Also helped in organisation of various events under the same.

Awards and Honors

- Received first prize in mathematics for *Picturing with parametric equations* project at the annual science fest of IISER TVM *Anvesha* where we used an oscilloscope to visualise sound. (*11/23*)
- Received runner-up award in physics for *Ion Trap* project at the annual science fest of IISER TVM *Anvesha* with guidance from Dr. Umesh R. Kadhane of the Indian Institute of Space Science and Technology. (*11/22*)
- Was among the top ∼1500 candidates selected for NAEST (National Anveshika Experimental Skill Test) out of 11403 students.