Resume

Education

BS-MS | Aug 2018 - April 2019 | IISER Mohali

• CPI: 9.8

SPI (Sem 1): 9.8

SPI (Sem 2): 9.8

12th Grade | Apr 2018 | Primus PU College

Physics: 99

• Math: 94

Chemistry:95

10th Grade | Mar 2016 | Prakriya Green Wisdom School

• Science: 94

Math: 95

Academic Achievements

Mimamsa Center toppers

My team was the centre topper in Mimamsa 2019, a Science quiz conducted by IISER-P.

KVPY

- Hold a KVPY Fellowship
- Qualified KVPY SA, SX, SB with a rank of 600, 1118 and 24 respectively

Vijyoshi - 2017

Attended the Vijyoshi camp in December 2017 against KVPY SA

Extra-Curricular Endeavors

Built The IISER M App for Android and PC - 2019

• I created a majority of the Unofficial IISER-M App for Android. A PC version of the same is also underway.

Contributed in building the Pakshi Birding App

• I contributed in making the Pakshi Birding App under Dr. Manjari Jain's Behavior and Ecology Lab, IISER M. Pakshi is an app developed to assist both budding and experienced birders.

Teaching underprivileged Children as part of RTE Act - 2016

 As a way to give back to the community, I taught underprivileged children English and Mathematics for two weeks in my school in 2016. The group involved two children, both of whom had learning disorders.

Knowledge of Multiple Coding Languages

• I know C++ and actively code in Python, Java (Android). I also am presently learning Julia for Scientific Computing. Please visit my GitHub account.

Research Experience

Linear Algebra of Quantum Mechanics and the simulation of a Quantum Computer | Arvind | Summer 2019

• This was an introductory reading to the Mathematical Structures that underlie Quantum Mechanics and then take it forward to a theoretical introduction to Quantum Information and Quantum Computing. I also attempt to simulate a Quantum Computer on a Classical computer and making a Julia module for the same. This paper serves as a very brief introduction to Quantum Computing and documentation of the code in the form while publishing.

Black body radiation in special relativistic frames | JS Bagla | Winter 2018

 As part of my 2018 winter project, I took up a project in Special Relativity under JS Bagla, wherein I looked at how Black Body Radiation transforms in a frame that is moving uniformly with respect to the source. We see that the radiation is no more uniform, leading to a force on the particle. The quantitative analysis of this force is done using numerical methods in Julia.

Earthian awards | Wipro-Prakriya | Sept-Dec 2014

Wipro LTD. organizes "The Earthian Awards" as part of their CSR initiative which
involves teams from schools and colleges submitting a research report on the broad
topic of the year. Our report dealt with the lakes of Bengaluru and how rapid
industrialization and urbanization, coupled with unempathetic public policies, have
led to declining quality and quantity of the natural resource.

Contact Me

+91 99453 80169 | dhruvasambrani19@gmail.com