

Vishal Sai Vetrivel

Curriculum Vitae

DAE Disha, NIUS Scholar

Education

- 2008–2019 **AISSE**, *The PSBB Millennium School – CBSE*, Chennai, 88.6%
2019–2021 **SSCE**, *The PSBB Millennium School – CBSE*, Chennai, 94.4%
2021–2026 **Int. Msc (Physics)**, *UM DAE CEBS*, Mumbai, Overall CGPA - 8.76
- Semester 1 – 9.04 SGPA
 - Semester 2 – 8.43 SGPA
 - Semester 3 – 8.96 SGPA
 - Semester 4 – 8.62 SGPA
 - Semester 5 – Awaited

Achievements/Milestones

- 2023 **NIUS Physics Camp 19.2**, *Summer Project*, TIFR (Mumbai)
Digital pulse shaping of HPGe detector for neutron damage study.
- 2022 **NIUS Physics Camp 19.1**
- 2020 **RSIC – IIT Madras**, (*Canceled due to COVID-19 pandemic*)
- 2018 **Times Spark Scholar**
- 2017 **International Rank 1 in SOF NCO**
- 2016 **Summer Camp on Astrophysics and Astronomy**

Projects

- Summer 2023 **Digital pulse shaping of HPGe detector for neutron damage study**
NUCLEAR AND COMPUTATIONAL PHYSICS, **DNAP**, **TIFR**, Mumbai
Developed an algorithm using CERN's ROOT to digitally correct the spectrum obtained from a neutron damaged HPGe detector which showed that there is likely a statistical correlation between rise times of pulses and neutron damage in spectrums under Prof. R Palit.
- Winter 2023 **Reading Project on Development of a Novel Algorithm For Nuclear Level scheme determination**
NUCLEAR PHYSICS, **DNAP**, **TIFR**, Mumbai

Languages

- English Tamil Native
Hindi Intermediate
Japanese Beginner (Currently Learning)

Computer skills

- 2016 – **Introduction to Modern Application Development (NPTEL)**, IIT Madras, Elite – 80%
- Proficient in Fortran, Rust, C#, Python, ROOT, NodeJS and tooling in Windows and Linux.
- Basic web development with Javascript, HTML, CSS.
- Various numerical methods for scientific computation.
- Expertise in Latex.
- Design knowledge using Canva and Adobe InDesign.
- Attended workshop on Android development during 4CCon - 2nd National Conference of Free Software Movement of India
- Most code published on Github. (Discord Bots ^[1] ^[2], Text Editors, Scientific Demos, etc.)
- Participated in Mindbox (2016–2018), HackerRank CodeRite (2019–2020), Advent of Code (2020–2023)

Interests

- Music (Drums): Certified at level 1 upto Grade 3 Trinity, Play in college band
- Debating and MUNs: Represented school and college at ISDS, Tandem, Brihaspati, Millennium MUN, IICM, etc.
- Elected responsibilities:
 - At School:
 - Director of the Debate Club - 2019–2020
 - Secretary of the Debate Club - 2020–2021
 - At College:
 - Student Committee Representative for the Science Club and the Literature Club
- Other Club Activities:
 - Member of The Science Club (<https://cbsscienceclub.github.io>)
 - Coordinator of the CEBS Lifestyle Instagram Handle (https://instagram.com/cebs_lifestyle)
 - Designer of the CEBS Novellus Annual Magazine
 - Founding Member of the Anime Club at CEBS