Abhishek Anil Deshmukh

Basic Info

✉ : abhishek.deshmukh@niser.ac.in
WWW : https://abhishek-deshmukh.github.io

⊕ : http://github.com/abhishek-deshmukh

- 2nd Year Int.MSc. Physics Student at National Institute of Science Education and Reserach, Bhubaneshwar, India.(2018-2023)
- Linux enthusiast
- DISHA fellow

Institutions

2018–2023	**Integrated M.Sc. in Physics.** *National Institute fo Science Education and Research, Bhubaneswar* Pursuing Int.MSc. with Majors in Physics and Minor in Computer Science.
2016–2018	**Jr. College** *Pace Jr.College, Thane, Maharashtra.* Maharashtra state boards of Secondary and Higher Secondary Education (HSc.): 79%
2004–2016	**School** *Abhinav Vidyalay ICSE, Dombivli, Maharashtra.* Indian Certificae of Secondary Education(ICSE):81.2%

Projects Undertaken

2019–Present	**SPR Simulation using FDTD** *Dr.Pratap Kumar Sahoo, National Institute fo Science Education and Research.* Simulating Visible light and nanoparticle interaction using FDTD algorithm to gain insight into SPR.
2019–Present	**Genomics Data analysis with a GUI** *Dr. Palok Aich, National Institute fo Science Education and Research.* Making a complete GUI application for doing genomic Data analysis
2018	**Bio-chemical Properties of DRP-6** *Dr.Abdur Rahaman, National Institute fo Science Education and Research.* Learned the basic methods of Bio-chemistry and studied properties of DRP-6 in tetra-hymena.
2015	**Ferrofluids** *Dr.Kedar Soni, Abhinav Vidyalay.* Presented my research on properties and applications of ferrofluid at GMRT's open day as the representative of my school.

Fellowships and Positions

2018–Present	DISHA Fellowship

Relevant Courses taken

Physics Theory	Electronics, Classical Mechanics-I & II, Electronics, Mathematical Methods-I & II, Quantum Mechanics-I, Electromagnetism-I
Computer Science Courses	Programming and Data Structures-I & II, Theory Of computation, Discrete Structure and Computation.

Languages

Human	English, Hindi, Marathi, Can understand many other indian languages like odia, gujarati etc.
Machine	Python, C++, Java, Javascript, Dart, Perl, R, bash/shell, some superficial knowledge of C; markup languages including LaTeX/X∃TeX, R Markdown, HTML, CSS.

Tools I Use

Scientific Packages

GNUplot, PyPlot, SciPy, OpenCV, NumPy, Pandas, Numba, PyMol.

Other Programs and packages I'm Familiar With

Git, Github, Django, Flutter, Microsoft Office, Libre Office Suite, tmux, Blender (mostly for video-editing), GIMP, pandoc. I've managed websites manually via ssh and vim using HTML/CSS/Python and with tools such as Github Pages and Netlify.

Public Code and Scripts

Integrator ⊕
I came across a integration which i could not do at the time so. Came down to the concept that it area under the curve and "brute forces" my way to a definite integral. Often comes in handy when stuck on a problem.

Documentation-Template ⊕
A documentation template made with docusaurus and mathjax. With this you can get up and running to write documentation for scientific code easily it even supports latex equations and not to mention with a modern look

compiler ⊕
Made a general purpose compiler, it imports all the things necessary. So now everytime you write code in any language just run this and voila.

StudentVim ⊕
Student vim is a set of plugins an settings, useful for students to take notes Using markdown and programming in general. Trying to make vim home like

NISER-Notes ⊕
The notes that I take during lectures in NISER. It is set to automatically update deploy when I commit to https://dunce007.netlify.com/. I try to keep it up to speed when ever i get time. Its a Mathjax available version of Docusaurus

Hobbies and Extra-curricular Activities

Swimming, Making Websites, Hiking, Mountain climbing
Black belt in Enshin Karate, and have been training in other fighting styles since then.
I train for 5k and 10k marathons
Can solve a rubik's cube in within a minute (best time 22 secs.).
Can learn any programming language in within a week.
I have Successfully organised Halloween, Fashion show etc. in NISER.
Can understand most of the north, east and west indian languages.
I have helped my batchmates in subjects they struggle in by taking "lecture".
Active member of Coding Club, Photography Club.