




Vinay Singh

Research Scholar

 Kanpur, Uttar Pradesh, 208013

 + 91 9560800827

 vs2255068@gmail.com

 <https://www.linkedin.com/in/vinay-singh-030098125>

 <https://zety.com/profile/vinay-singh/418>

Meticulous and analytical Researcher with 4 years of educational and hands-on experience in Physics. Adaptive team player with in-depth knowledge of data collection, confidential document control and problem-solving. Highly motivated individual committed to hard work and intensive analysis. Flexible and polished Senior Research Associate promoting well-developed skills in

- C++, Scilab, Matlab, Python, Fortran
- Origin Pro, ROOT, GEANT4, SRIM, KATEX, JSX Generator
- **Machine Learning, Data Science**



Skills

- Data analysis
- Research program planning
- Microsoft Excel proficiency
- Quantitative analysis
- Electron microscopes
- Spectroscopy
- Team Building
- Research implementation
- Deep-dive data analysis
- Quantum Optics



Work History

Researcher

IIT Kanpur, Kanpur, Uttar Pradesh

- Performed research into study topics to increase knowledge and ability to provide valuable contributions.
- Collaborated with staff to develop and implement best practices and accomplished all team goals.
- Gathered and organized information for research purposes.
- Collaborated with team members to initiate best practices to achieve

2020-08 - Current

2020-03 - 2021-07

- organizational goals.
- Used Python to determine data-set correlations while initiating qualitative functions.
- Performed Quantum entanglement experiments and research and documented all findings.
- Directed students in performing and completing assigned tasks.
- Performed statistical, qualitative and quantitative analysis.

Subject Matter Expert

Six Red Marbles, Bangalore, karnataka

- Collaborated with senior management and business line management to identify and prioritize new concepts for development and launch.
- Designed and prepared technical reports, studies and related documentation.
- Marked charts and graphs to record results and prepared and delivered presentations, training and briefings required by contract.

2019-05 - 2021-07

Research Intern

Karlsruhe Institute of Technology, Karlsruhe, Baden-Württemberg, Germany

- **Dark Matter** particle(WIMP) analysis using Simulation Technique in **GEANT4, ROOT and SRIM** Calculated Track Length, Energy Deposit and many other interaction Properties of WIMP particles with Palaeo Detectors, which are radically different from conventional detectors located inside deep underground Labs.
- Researched various subjects that were related to project and presented information to appropriate stakeholders.
- Attended meetings and presentations to learn more details about Dark Matter.
- Compiled data in reports and other documents using **Overleaf, Online Latex editor**.
- Collected, analyzed and reviewed experimental data for publication and presentation.
- Extensively used **Python** to compile experimental data.

2018-07 - 2020-01

Subject Matter Expert

Chegg, Mumbai, Maharashtra

- Documented client progress through case notes and documentation.
- Solved Physics related complex problems using Scilab

2018-07 - 2020-07



Education

Master of Physics: Physics

IIT Bombay, Delhi University - Powai, Maharashtra

GPA: 8.94

- Received **Scholarship for Higher Education (SHE)** under the scheme, innovation in science pursuit for inspired research (**INSPIRE**) by department of science and technology by Government of India.
- Research Project: Direct Detection of WIMP Dark Matter under Prof. Vikram Rentala .In this Project we were searching for the best Crystal Material (like-

2015-07 - 2018-06

halite crystals) which can have measurable interaction with Dark Matter Candidates so that we can have a good support of Λ CDM (**Lambda cold dark matter**).

Bachelor of Science: Physics

Kirori Mal College - New Delhi

CGPA - 8.55

- Received INSPIRE from Government of India.



Accomplishments

Entrance exam year AIR

IIT JAM 2018 25

JEST 2018 26

GATE 2020 14

CSIR JRF 2020 65