Snigdha Keshari

Contact

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Summary

A highly motivated and academically accomplished aspiring astrophysics student with a demonstrated passion for space exploration. Proven research skills through the independent discovery of a potential asteroid and the construction of scientific instruments. Skilled communicator with experience leading astronomy club activities and writing published articles. Seeking admission to a prestigious undergraduate program to advance knowledge and contribute to the field of astrophysics.

Education

- **Pace Junior Science College**, Mumbai, India (2023-Present)
  - Class XII (Science Stream), Expected Graduation: 2025
  - Subjects: Physics, Chemistry, Mathematics, Computer Science, English
  - Achieved 91.7% in Class XI (2024)
- **Podar International School**, Mumbai, India (CBSE Board) (2020-2023)
  - Class X, Graduated: 2023
  - Achieved 94.6%

Skills

- Strong foundation in Physics, Chemistry, and Mathematics
- Observational accuracy and data analysis
- Critical thinking and problem-solving
- Effective communication and science outreach
- Innovative and self-driven
- Leadership and teamwork
- Proficient in English and Hindi

Research

- Analyzed astronomical data to identify a potential asteroid in the All India Asteroid Search Campaign (July 2024). Authored and published a research paper on this discovery in the *International Journal of Science & Research (IJSR)*. Overcame initial challenges in research methodology, leading to a deeper understanding of celestial dynamics and core physics principles.

- Constructed a telescope, CD spectroscope, and conducted experiments to understand the wave nature of light.

Internships & Professional Experience

- **Serviceforce Auto India Pvt Ltd**: Completed a 2-week internship at the largest 2-wheeler service chain network in India.
- **Hansraj Hulaschand & Co, Nepal**: Gained 2 weeks of social media handling experience for a company under the Golchha Group, the largest conglomerate in Nepal.

Leadership beyond Academics

- Led activities and facilitated discussions on complex astrophysical concepts as Astronomy Club Leader.
- Received a Certificate of Appreciation from the International Astronomical Search Collaboration, a NASA partner, for asteroid discovery.
- Awarded the Prabhutva Award and Meritorious Student Award for academic excellence.
- Received Certificates of Excellence in Olympiads in Science, Mathematics, English, and Reasoning & Aptitude.
- Recognized at school and district levels for Kathak Dance and Karate.
- Presented well-received posters on Quantum Mechanics and the Theory of Relativity at school exhibitions.
- Serving as Head Girl at Pace Junior Science College (Class XI & XII) and involved in conducting student body meetings and awareness programs.
    - Cultural Meets
    - Mental wellness awareness program
    - Co-ordination between teachers and students

Publications

- **Articles** on "*The Journey of Gravitational Waves*" and "*Black Holes: Keys to Understanding Our Universe*" published in Hindustan Times (India), Newspoint (India), and Kids Insider (Nepal) in July 2024.
- **Research Paper** on *"Methods and Techniques for Detecting and Calculating the Trajectory of the Potential Asteroid SNI2307,"* published in the *International Journal of Science & Research (IJSR), Volume 13, Issue 10, October 2024*.

Creative Writing Experience and Recognition

- **Fusion Poetry Collection**: Developing a unique collection of fusion poems that intertwine astrophysical concepts with personal reflections, making scientific phenomena relatable. Sample themes include asteroid discovery, gravitational waves, dark matter, and cosmic exploration. Poems from this collection have received positive feedback from mentors and peers for their ability to merge science with art.
- **Science Fiction Novel (In Progress)**: Currently writing an original science fiction novel, with 8 chapters completed, that delves into themes of space exploration and

human resilience. This work has received positive feedback from my High School English teacher, highlighting its unique blend of narrative depth and scientific intrigue. Through this project, I've honed skills in narrative development, world-building, and the seamless integration of scientific concepts into fiction. I aim to complete the novel and pursue publication to connect with a broader audience.

- **Creative Integration through Music**: Translating scientific themes into music, I compose original guitar pieces based on fusion poetry. These compositions create a sensory experience of scientific concepts like particle motion and cosmic rhythms, showcasing my commitment to making science accessible through multiple creative channels.

Extracurricular Activities

- **Community Service**: Participated in beach clean-ups with Project Mumbai and raised over INR 80,000 (approx. USD 1,000) with Varday Vikas Trust for underprivileged children's education.
- **Sports & Arts**: Achieved a Green Belt in Karate, trained in Kathak dance, skilled in playing the guitar, and proficient in sketching. Earned a Grade I certification in the Theory of Music from Trinity College London.
- **Adventure Sports**: Enjoys paramotoring, paragliding, and scuba diving.

Additional Information

- IELTS Score: 7.0
- Advanced Level Courses: Completed courses suited for IIT Entrance Examination.
- Science Fairs: Presented research on subatomic particles.
- Multicultural Upbringing: Experienced living in diverse cultural settings.
