

Bhavya Kumari

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Professional Summary

Passionate and detail-oriented B.Tech Bioengineering student specializing in molecular docking, computational biology, and scientific communication. Experience in leveraging tools such as PyRx and AutoDock for research projects. Proven skills in content writing, social media marketing, and leading student club initiatives. Looking for internships or project roles in biotechnology, bioinformatics, or science communication.

Skills

Molecular Docking, PyRx, AutoDock, Python Programming, Data Analysis, Bioinformatics, Scientific Writing, Gram staining, Centrifuges, Gene sequencing, NCBI Blast

Education

Vellore Institute of Technology, Bhopal, B.Tech in Bioengineering September 2022 - Onward
• CGPA: 8.60/10
• **Coursework:** Biochemistry, Cancer Biology, Molecular Biology, Python

Projects

The Study Of Breast Cancer and The Effects of Potent Phytochemicals Present in *Uncaria macrophylla*

- Conducted molecular docking analyses to study interactions between phytochemicals and overexpressed breast cancer receptors.
- Identified quercetin, hirsutine, and kaempferol as effective compounds against key receptor pathways.
- Responsible for handling HER2 receptor analysis with selected phytochemicals.
- Tools used: PyRx, Discovery Studio, AutoDock Tools

Aerogriff ,

- Designed and developed a drone system that integrates IoT and machine learning (TensorFlow) to detect plant diseases, hydration issues, and spatial distribution.
- Contributed to the image propagation pipeline to validate disease detection models.
- Proposed future enhancements, including LiDAR for 3D mapping and real-time monitoring.
- Tools used: Kaggle, NCBI, VS code

Experience

Content Writing Intern, Earth5 June 2025 - July 2025
Developed SEO-optimized environmental content and engaging social media posts.,
Strengthened research and storytelling skills for diverse audiences.

Achievements

- Social Media and Marketing Lead, Cyber Warriors Club, VIT Bhopal — Led content creation and event promotion to boost reach, engagement, and participation. **October 2023 - Present**
- Social media core member, Bioengineering club VIT Bhopal – Develop and execute marketing strategies to expand club visibility and participation. Promotion and ensuring maximum reach. **October 2023 - Present**
- Participated in ZS Campus Beats Hackathon, showcasing problem-solving and teamwork skills.
- Secured 1st prize in the Karman Rocketry Modeling Competition, showcasing creativity, precise design, and effective teamwork.
- 1st Prize, Scientific Poster Competition, RABVIT: Highlighted research communication and visual presentation skills.

Additional Information

Languages: Hindi (Native), English (Fluent)
Hobbies: Reading, Digital and Traditional Art