

Pranav Ballaney

Lucknow, India

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Email: ballaneypranav@gmail.com

Mobile: +91-9044849046

LinkedIn: [ballaneypranav](#)

Education

- **Birla Institute of Technology and Science, Pilani**
Bachelor of Engineering (Hons.) in Computer Science
Master of Science (Hons.) in Biological Science
Cumulative CGPA: 9.25
Goa, India
August 2018 to August 2023
(expected)
- **Delhi Public School, Lucknow**
All India Senior Secondary Certificate Examination
Percentage: 89.6%
Lucknow, India
Graduated May 2017

Work Experience

- **Debian**
Student Developer under the Google Summer of Code program
Worked on quality assurance and continuous integration of applications in life sciences and medicine.
May 2020 – August 2020
([Link to Project](#))

Research Experience

- **iGEM Competition 2020, BITS Goa**
Member of the Wet Lab, Human Practices and Software Teams
November 2019 – November 2020
([Link to Project](#))
Worked under the supervision of Dr. Sumit Biswas, as part of the first iGEM team from BITS Goa, on reduction of post-harvest losses in sugarcane, by using genetically engineered bacterial systems.
- **CSIR-Institute of Genomics and Integrative Biology**
Research Intern
May 2020 – June 2020
Worked under the guidance of Dr. Lipi Thukral, Senior Scientist at the Computational Structural Biology lab, to quantify interactions between the SARS CoV2 spike glycoprotein and the human ACE2 receptor. Built visualizations using comparative force-directed graphs to understand these interactions.
- **Study Oriented Project**
January 2020 – April 2020
Worked under the supervision of Dr. Sumit Biswas, on tissue-specific re-evaluation of the efficacy of MicRoOn in identifying miRNAs associated with cancer, using machine learning techniques.

Projects

- **iGEM WikiSync and the iGEM Wiki Starter Pack**
June 2020 – August 2020
Python and Node.js applications designed to help iGEM teams build their wikis. Adopted by several iGEM teams throughout the competition season.
[iGEM WikiSync](#)
[iGEM Wiki Starter Pack](#)

Certifications

- **Deep Learning Specialization**
deeplearning.ai on Coursera
May 2019
([Certificate](#))

Skills

Languages	Python, C, C++, HTML, CSS, JavaScript, Bash
Frameworks	Flask, jQuery, NumPy, Pandas, Scikit-Learn, ProDy
Bioinformatics	Protein modelling, docking and secondary structure prediction

Relevant Courses

Biology	Biochemistry, Microbiology, Cell Biology, Molecular Biology, Bioinformatics and Genetics, Recombinant DNA Technology, Animal Physiology
Mathematics	Mathematics I (Multivariable and Vector Calculus), Mathematics II (Linear Algebra and Complex Analysis), Mathematics III (Differential Equations), Probability and Statistics
Computer Science	Object Oriented Programming, Discrete Structures for Computer Science, Logic in Computer Science

Other Experience

- Peer Mentor as a part of the Peer Mentorship Program at BITS Pilani, helping students navigate through college and looking after their academic and personal interests.

Scholarships and Awards

- Received institute scholarship at BITS Pilani for each semester in college.
- Received a Letter of Appreciation from Union Minister of Education for obtaining a CGPA of 10 in 10th Standard Board Examinations.

Extra-curricular Activities

- Core member at Synchronoise, the BITS Goa a cappella club
- Core member at Srutilaya, the BITS Goa classical music club