

Pranav Kamate

Roll No.: 22BOE10109
Email-id : pranavkamate245@gmail.com
Mobile No.: 9834659835
[LinkedIn Profile](#)

EDUCATION

Year	Degree	Institute	CGPA/%
2022 - 2026	B.Tech	Vellore Institute of Technology, Bhopal	8.10 CGPA
2022	12 th Maharashtra State Board	Devchand Collage, Arjunnagar	74.83%
2020	10 th Maharashtra State Board	Mohanlal Doshi Vidyalaya, Arjunnagar	91.80%

PROJECTS

- Phytoremediation Using Seedballs** October 2024- December 2024
 - Implemented an eco-friendly project that used phytoremediation to address soil and water pollution through the use of innovative seedball technology.
 - Demonstrated a 33 % reduction in heavy metal concentrations over a 12-month case study on a 40 square meter contaminated site.
 - Focused on key areas such as creating seedball formulations, developing deployment strategies, and monitoring the growth of plants and the quality of the soil.
- Deep Learning Solutions for Early Pneumonia Detection** January 2025- February 2025
 - Achieved 97.21 % accuracy and 0.982 AUC using a custom CNN on 5,856 X-ray images, outperforming InceptionV3 and ResNet50.
 - Improved generalization by applying 40 % dropout in convolutional layers; boosted accuracy by 2 %.
 - Optimized inference to 122 ms/image for real-time diagnosis in low-resource settings.
 - Enhanced model robustness via GAN-based augmentation, 150-epoch training, and hyperparameter tuning.
- AI-Powered Bioinformatics Pipeline for Cancer Genomics** August 2025-September 2025
 - Engineered a multi-tiered bioinformatics pipeline to analyze genomic data (MAF files) and prioritize functional non-coding variants in lung cancer.
 - Applied advanced AI models and bioinformatics tools to annotate variants, predict their functional impact, and filter out benign genetic noise to isolate high-potential candidates.
 - Translated raw genomic data into clinically actionable insights, identifying variants with the potential to drive tumorigenesis and support personalized treatment strategies.

COURSES AND CERTIFICATIONS

- Bits and Bytes of Computer Networking (Coursera) – Jan 2024 : [Certificate](#)
- The Joy of Computing Using Python- (NPTEL): [Certificate](#)
- MongoDB Database Admin Path (Self-Managed): [Certificate](#)

TECHNICAL SKILLS

- Data Science Machine Learning:** Python, SQL, Pandas, NumPy, Scikit-learn, TensorFlow.
- Laboratory Techniques:** DNA Extraction, Biochemistry, Streaking, General Lab Work
- Developer Tools:** Git, GitHub, VS Code, Streamlit, REST APIs

EXTRA CURRICULAR ACTIVITIES AND ACHIEVEMENTS

- Active Member, FYI Club** 2022 - 2024
 - Collaborated with club members to successfully plan and execute three campus events over a two-year period, including intra-college gaming competitions.