

NAISARG PATEL

+91 97272 57819 | naisargbpatel14@gmail.com

 naisarg14 |  naisarg14

Vapi, Gujarat - India

EDUCATION

• Vellore Institute of Technology [🌐]

Bachelor of Technology in Biotechnology (4 Year Course)

◦ GPA: 9.40/10

Sep 2022 - Jun 2026

Vellore, India

• Smt. Sandra Shroff Gnyan Dham School

Higher Secondary Education (All India Senior School Certificate Examination [AISSCE])

◦ Grade: 95%

May 2022

Vapi, India

INTERNSHIPS

• University of Tartu [🌐]

Bachelors Thesis (6 Months)

Dec 2025 - Ongoing

Tartu, Estonia

• Micro Crispr Pvt. Ltd. [🌐]

Summer Intern

May 2024 - Jun 2024

Chala, India

PROJECTS

• Explainable Multi-Modal Deep Learning for Risk Stratification of Female Hormone-Related Cancers in UK Biobank [🌐]

Vellore Institute of Technology, India

Jan 2026 - Ongoing

• Novel Machine Learning Approach to Multi-Omics Cancer Subtype Classification

University of Tartu, Estonia

Dec 2025 – Ongoing

• Bioinformatics Target Prioritization Pipeline

Zastru Innovations and Vellore Institute of Technology, India

Apr 2025 - Ongoing

• iGEM 2024 VIT-Vellore Team Member

Vellore Institute of Technology, India

Feb 2024 – Nov 2024



PUBLICATIONS

J=JOURNAL, S=IN SUBMISSION

- [J.1] Naisarg Patel, Samrat Sarkar, Bala Murali V M, Ishan Kashyap, Premkumar Thiruselvam, Vino Sundararajan, Sajitha Lulu Sudhakaran. **Understanding the action of Bamocafactor as a potential drug candidate against Cystic Fibrosis Transmembrane Regulator Protein: A Computational Approach.** Published in PLOS ONE at <https://doi.org/10.1371/journal.pone.0328051>
- [J.2] Naisarg Patel, Ankita Lawarde, Suhas Manikant Surisetty, Premkumar T, Prakash Lingasamy, Vino S, Sajitha Lulu S, Andres Salumets, Dr Vijayachitra Modhukur. **Serum-MiR-CanPred: Deep Learning Framework for Pan-Cancer Classification and miRNA-Targeted Drug Discovery.** Published in RNA Biology at <https://doi.org/10.1080/15476286.2025.2577433>
- [J.3] Naisarg Patel, Rajesh Sharma, Prakash Lingasamy, Vino S, Sajitha Lulu S, Vijayachitra Modhukur. **Understanding User Perceptions of DeepSeek: Insights from Sentiment, Topic and Network Analysis Using a Reddit-Based Study.** Published in Frontiers in Artificial Intelligence at <https://doi.org/10.3389/frai.2025.1703949>
- [J.4] Naisarg Patel, Rajesh Sharma, Prakash Lingasamy, Vino S, Sajitha Lulu S, Vijayachitra Modhukur. **Temporal Evolution of Digital Health Communication in Rheumatoid Arthritis: A Longitudinal NLP Analysis of Reddit Discussions (2018–2024).** Published in PLOS ONE at <https://doi.org/10.1371/journal.pone.0341006>
- [S.1] Naisarg Patel, Suhas Manikant Surisetty, Aman Ajay Chintala, M. Maneesha, V. Mohanasrinivasan, C. Subathra Devi. **Enhanced Serratiopeptidase Production and Optimization of process parameters Using a Sapota-Enriched Medium from a Novel White Serratia marcescens Strain NSA-8.** Manuscript under review in Industrial Crops and Products.
- [S.2] Masuma Khatun, Naisarg Patel, Marina Loid, Aspasia Destouni, Prakash Lingasamy, Sajitha Lulu S, Maire Peters, Rajesh Sharma, Andres Salumets, Vijayachitra Modhukur. **Male Infertility Disclosure on Reddit: A Study of Emotional Expression, Information Exchange, and Peer Support.** Manuscript under communication in Health Communication.
- [S.3] Blessy Kiruba, S B Nirjanan, Derrin Bright, Naisarg Patel, Carolyn Ann Biju, Vino Sundararajan, Sajitha Lulu S. **Comparative Analysis of HPV-Positive Cervical and Head and Neck Cancers Using WGCNA and Machine Learning Identifies Shared Biomarkers.** Manuscript under review in Frontiers in Bioinformatics.

LEADERSHIP EXPERIENCE

• iGEM VIT-Vellore Team Lead

Vellore Institute of Technology

Mar 2025 - Nov 2025



- Led a 15-member team for the iGEM 2025 synthetic biology competition.
- Coordinated project design, lab work, modeling, and outreach.
- Presented the results at the Grand Jamboree in Paris, France

SKILLS

- **Programming Languages:** Python, R, Bash
- **Web Technologies:** HTML, CSS
- **Data Science & Machine Learning:** TensorFlow, Scikit-learn, Pandas, Optuna
- **Cloud Technologies:** Google Colaboratory
- **Computational Skills:** Molecular Dynamics Simulations (GROMACS), Molecular Docking, Mutation Analysis (Rosetta), Sentiment Analysis (NLTK), Topic Modeling
- **Laboratory Skills:** Gel Electrophoresis, DNA/RNA Extraction, PCR, Protein Purification, Enzyme Assays
- **Other Tools & Technologies:** Jupyter Notebook, Visual Studio Code, SQLite3
- **Research Skills:** Literature Review, Data Analysis, Scientific Writing, Data Analysis, Research Presentation

HONORS AND AWARDS

• Silver Medal (iGEM 2025)

Nov 2025

International Genetically Engineered Machine (iGEM)



• BIDFEST 2025 - Third

Mar 2025

Club SBE, Vellore Institute of Technology



• Certificate of Merit (2024-25)

Apr 2025

Vellore Institute of Technology



• Special Achiever (2024-25)

Apr 2025

Vellore Institute of Technology



• Silver Medal (iGEM 2024)

Nov 2024

International Genetically Engineered Machine (iGEM)



• Certificate of Merit (2023-24)

Apr 2024

Vellore Institute of Technology



• BIDFEST 2024 - First Runner Up

Mar 2024

Club SBE, Vellore Institute of Technology



CERTIFICATIONS

• Harvard University: CS50's Introduction to Artificial Intelligence with Python

2024

• NPTEL: Forests and their Management

2024

• NPTEL: Google Cloud Computing Foundations

2023

• Harvard University: CS50's Introduction to Programming with Python

2022

• Harvard University: CS50x

2022

ADDITIONAL INFORMATION

Languages: English (C1), Gujarati (C2), Hindi (C1)

Interests: Reading, Video games, Cooking, Traveling

REFERENCES

1. Dr. Sajitha Lulu S

Associate Professor Sr, School of Bio Sciences and Technology

Vellore Institute of Technology, Vellore

Email: ssajithalulu@vit.ac.in

Phone: +91 99448 07641

Relationship: Professor and Project Supervisor

2. Dr. Vijayachitra Modhukur

Bioinformatics Specialist

University of Tartu, Estonia

Email: vijayachitra.modhukur@ut.ee

Phone: +372 58206815

Relationship: Project and Thesis Supervisor