

SHAKTHI J

+91 7337810224 | shakthipostbox@gmail.com | [LinkedIn](#) |
Bengaluru 560008

About Me - With over a year of hands-on experience, I continuously learn and apply strong problem-solving skills to deliver impactful results using the knowledge I've gained.

SKILLS

Operating Systems: Linux Environment, Windows

Programming Languages: Python, R, Bash, Shell Scripting

Tools & Platforms: GitHub, Microsoft Office, Open-Source Software

Data Science & AI: Data Analysis, Biostatistics using AI, Machine Learning Models

Bioinformatics: Pipeline Development, Next Generation Sequencing (NGS)

Research & Professional Skills: Scientific Literature Review, Communication, Teamwork

EXPERIENCE

Research Intern – Institute of Bioinformatics and Applied Biotechnology (IBAB) | Feb 2025 – June 2025

- Built structured databases to organize and manage environmental metagenomic datasets in a Whole Genome Sequencing (WGS) project.
- Designed and automated analysis pipelines using Python, Bash, and shell scripting in a Linux environment.
- Utilized Google Colab to enable scalable, cloud-based multi-omics data visualization and processing.
- Ensured reproducibility through version-controlled documentation and collaborative pipeline management.

Biokart Indian Pvt. Ltd

- Junior Bioinformatician** | April 2023 - August 2023
 - Performed multi-layered omics analyses: 16S/ITS microbiome studies, SNP Variant calling.
 - Generated interactive QC reports and communicated findings with 50+ clients.
 - Integrated patient and control datasets using customized R and Python workflows.
 - Applied supervised learning and statistical models for comparative disease analysis.
- Bioinformatics Intern** | January 2023 - March 2023
 - Supported integrative analysis of metagenomics and phylogenetic datasets.
 - Delivered clean and reproducible outputs via scripting and visualization.
 - Offered full-time position after internship.

EDUCATION

MSc in Bioinformatics | Garden City University | 88% (Sem3) | 2025

BSc in Biotechnology, Biochemistry, and Genetics | Garden City University | 81.7% | 2023

Pre-University (PCMB) | St. Joseph's Indian Composite PU College | 72.33% | 2020

Secondary Education (10th) | SSVN English High School | 84.64% | 2018

PROJECTS

Metagenome Analysis App Development | Present

Engineered cloud-based pipelines in Google Colab, processing 5000+ multi-omics data points per run, accelerating data visualization by 75% and enabling identification of key biomarkers for disease research.

16S rRNA Analysis on Gut Microbiota in Hypothyroidism | 12/24 – 2/25

Led a study comparing microbial diversity and functional analysis in 16S rRNA sequences of hypothyroid and healthy pregnant women.

AI/ML-Based Classification of Lung Cancer Using Gene Expression Data | 11/24 - 12/24

Implemented AI/ML techniques to classify lung cancer subtypes using the TCGA-LUSC dataset, achieving accurate predictions through PCA and machine learning models.

Comparative Analysis of Chloroplast Genomes | 5/23 - 8/23

Mapped and compared chloroplast genomes across plant species to analyze evolutionary divergence using next-generation sequencing

CERTIFICATES and ACHIVEMENT

Exploring Your Microbiome – Coursera

Hands-on Introduction to Linux and Shell Scripting – Coursera

Introduction to Small Molecule Drug Discovery & Development – Coursera

Bioinformatics I: Finding Hidden Messages in DNA – Coursera

5th Prize – Samatva Annual Lecture Competition (Manipal Institute of Regenerative Medicine)

LANGUAGES – English, Hindi, Kannada, Tamil, Telugu

VOLUNTEER - National Cadet Corps (NCC) - Sergeant | August 2020 - July 2023 |

INTERESTS -Personalized Medicine, Big Data Analytics