

Summary

Highly motivated Master of Science candidate with practical experience in Bio-informatics, Botany and Microbiology, specializing in In Silico drug screening. Highly curious, Initiative and having team management skills acquired through academic and volunteer roles. Seeking to leverage advanced research skills and have technical proficiency to contribute to cutting-edge research in biotechnology.

Education

2023 – 2025 **Master of Science**, *St. Thomas College, Palai, Kottayam, Kerala.*

- CGPA 4.16/5.00
- GRADE: A +
- Percentage: 83.2 %

2020 – 2023 **Bachelor of Science**, *St. Thomas College, Palai, Kottayam, Kerala.*

- CGPA 8.1/10.00
- GRADE: A
- Percentage: 81.00 %

2018 – 2020 **Higher Secondary**, *St. Sebastian's H.S.S, Kadanad, Kottayam, Kerala*

Research and Technical Experiences

2025 (June - Present) **Certificate Program in Bioinformatics**, **Rajiv Gandhi Centre for Biotechnology (RGCB), Trivandrum, India.**

- Molecular Screening and Docking.
- Utilized Python and Unix platform, Learned CLI.
- ADMET studies (Pharmacokinetics (PK) studies)
- Managed project workflow, including target preparation, ligand optimization, and post-docking analysis using [PyMOL / VMD / Discovery Studio].

2025 (April - June) **Masters Project**, **Jawaharlal Nehru Tropical Botanic Garden and Research Institute (JNTBGRI), Trivandrum, India.**

TITLE: In silico screening and identification of lead molecules from *Ocimum americanum* with multitarget activity against SARS-CoV-2.

- Molecular Screening and Docking.
- Utilized Python and Unix platform, Learned CLI.
- ADMET studies (Pharmacokinetics (PK) studies)
- Managed project workflow, including target preparation, ligand optimization, and post-docking analysis using [PyMOL / VMD / Discovery Studio].

May 2024 **Internship**, **Jawaharlal Nehru Tropical Botanic Garden and Research Institute (JNTBGRI), Trivandrum, India.**

Plant Molecular Biology

- DNA isolation of *Elettaria cardamomum*.
- Gained hands-on experience in laboratory techniques, including DNA extraction, PCR amplification, and gel electrophoresis, which are essential for molecular studies.

2023 **Degree Dissertation**, *St. Thomas College, Palai, Kottayam, Kerala*

Study on the adulteration of selected common medicinal plants in Kerala.

- Developed strong skills in plant identification, Medicinal use and Adulterant used.

2023 **Wet Lab Practicals**, *St. Thomas College, Palai, Kottayam, Kerala*

Study on the adulteration of selected common medicinal plants in Kerala.

- Developed strong skills in plant identification, Medicinal use and Adulterant used.
- Plant Identification - Taxonomy.

Technical Skills and Proficiencies

- Programming: Python, HTML, JS, CSS, R (Conceptual), Unix/Linux Shell, MS Office, MS Excel, AI Prompt engineering, Machine Learning.
- Bioinformatics Tools: Molecular Screening and Docking, Molecular Visualization, Ligands library preparation, Sequence Analysis, Protein Modeling and AI Tools.
- Laboratory Techniques: DNA Extraction, Sample Preparation, Microscopy, Sterile Techniques, Bacterial and Fungal Isolation and Culture.
- Soft Skills: Curiosity, Quick learning ability, Adaptability, Creativity and idea generation, Vision and strategic thinking, Initiative, Persistence and ambition, Organization, Administration, Leadership, Team management.
- Other Technical Skills: Web - Designing, Ligand Library Preparation, Telegram Bot Creation, Photo and Video Editing

Leadership and Volunteering

- 2025 **Volunteer**, *SANTHWANA Rehabilitation Centre, Thiruvananthapuram*
- Volunteer – Provided care and support for individuals with mental illness.
- 2023 – 2025 **Botany Department Association President**, *St. Thomas College, Autonomous, Palai*
- Led the student association for the Botany department.
 - Initiated, organized, and managed academic and cultural events.
 - Managed a one week Mega Event - "LUMINARIA".
- 2023 – 2025 **Placement Coordinator**, *Botany Department*
- Coordinated placement activities.
 - Part of the organizing team - Career Expo.
- Present **Science Volunteer**, *DIGIVOL Kew (Plant Transcribing)*
- Transcribing plant specimens, enhancing data accuracy for the Kew Gardens Herbarium.

Certifications and Workshops

- **7th International Conference on Nutraceuticals and Chronic Diseases (INCD - 2025) and 11th Synopsis on Translational Cancer Research.** - International Conference - (University of Kerala, Thiruvananthapuram).
- **Employment Enhancement Training Programme.** - Training - (St. Thomas College, Palai).
- **Introduction to Unix, Python and Bioinformatics.** - Add-On Course - (St. Thomas College, Palai).
- **Genetic Engineering and Application** - Workshop - (St. Dominic's College, Kanjirappally).
- **Workshop On Dissertation Writing.** - Workshop - (Tropical Institute of Ecological Science - TIES).
- **Protein Structure Modelling and 3D Visualization.** - Workshop - (Rajiv Gandhi Centre for Biotechnology - RGCB).
- **Bio-Insight Webinar Series: Exploring the wonders of Life Science.** - Seminar - (St. Thomas College, Palai).
- **Endangerment Of Forest Resources And Eco-Restoration.** - Seminar - (St. Thomas College, Palai).
- **Cherishing Our Heritage: Ensuring Biodiversity and Conservation** - Seminar - (St. Thomas College).

Extra curriculum

- **Science Project Competitions** - Electronics - (St. Sebastian's H.S.S, Kadanad, Kottayam, Kerala).
- **Karate Martial Arts** - Kyokushin - (St. Sebastian's H.S.S, Kadanad, Kottayam, Kerala).

Hobbies

- Coding
- Drwaing
- Reading Tech News
- Travelling
- Photography
- Playing Chess