

# Methun George MSc Life Science Informatics Bachelor of Pharmacy

### **Contact Information**

Email: methungeorge333@gmail.com

**Phone:** +49 17629214305

Address: Bahnhofstraße 10, 92559 Winklarn, Germany

**GitHub:** https://github.com/georgejr45

### About Me

I am a bioinformatician with a pharmaceutical background, working at the intersection of health and life sciences. Experienced with both human and plant data, with a strong interest in expanding knowledge and driving innovation in computational biology through continuous learning

Date of Birth: May 3, 1996 Place of Birth: Kerala, India Driver license: Class B

### Work Experience

Bioinformatician From March 2025

### Leibniz Institute of Plant Biochemistry (IPB), Halle

- Developed an in-house spectral library for mass spectrometry data using the FragHub platform.
- Contributed to FragHub by identifying and fixing bugs, assisting with corrections, and testing its functionality using in-house and public Mass Spectrometry datasets.
- Currently in the NFDI4Chem project: Extraction and conversion from Chemotion to MassBank.

### Reserch Assistant and Master Thesis Leibniz Institute of Plant Biochemistry (IPB), Halle

June 2024 - February 2025

- Master thesis in Computational Plant Biochemistry department of IPB under the supervision of Dr. Steffen Neumann
- Help with NFDI4Chem consortium meeting 2024.

#### Medical Assistant Volunteer

June 2022 - October 2022

Aicher Ambulanz Union, Bayerisches Impfzentrum, München

- Assisted healthcare professionals and contributed to efficient operations through administrative duties.

### COVID-19 Test Administrator

August 2020 - January 2021

Munich International Airport, München

- Administered COVID-19 tests, prioritizing accuracy, efficiency, and patient comfort.

### Clinical Pharmacist

May 2018 - September 2019

St. George Hospital Vazhakulam, India

- Optimized patient care through collaborative medication management and patient counseling.

10/2019 - 03/2025

Master's in Life Science Informatics, Technische Hochschule Deggendorf, Germany Core Subjects: Bioinformatics-Algorithms and Data Structures, Biomedical Data Analysis, Sequencing Technologies, Biostatistics (2 modules), Life Science (2 modules), Data Management, Data Analysis and Data Mining, Informatics (2 modules), Data Visualization, Informatics and Biomedicine.

### Master Thesis: Development of an R toolbox for Near-infrared Spectroscopy Data processing and analysis of Plant Metabolic Phenotypes

- Gained hands-on experience in open-source software development using R, including modular programming and documentation best practices.
- Learned to design and implement custom functions for spectral data processing and integration using SummarizedExperiment objects.
- Developed expertise in applying machine learning models (PLSR, Random Forest, CNN) for trait and metabolite prediction.
- Gained experience working in a High Performance Computing (HPC) environment for training deep learning models.
- Strengthened understanding of linear, non-linear, and deep learning approaches in the context of spectral data.

07/2013 - 07/2017

Bachelor of Pharmacy, Kerala University of Health Sciences, India

Core Subjects: Pharmacology, Biochemistry, Pharmacognosy, Organic chemistry, Pharmaceutics, Industrial pharmacy, Pharmaceutical analysis, Microbiology and Biotechnology.

### Projects Undertaken

### Senescence Gene Expression Pattern in Melanoma: A Comparison Between Cell Model and Clinical Data

Technische Hochschule Deggendorf (THD).

## A Review on the Responsible Use of Antimicrobials for Veterinary Purpose Kerala University of Health Sciences, India

### Skills and Software

### Languages

English - C1(IELTS British Council), German - B1(Goethe Certificate), Malayalam - Native

### Software and Technical knowledge

- R-Programming(good), Python(good), Linux and Shell scripting (good), LaTex
- Infrastructure : Docker, Singularity, Anaconda, Git
- Application packages: FragHub, DESeq2, STAR, GSEA, R-FieldSpectra, FireBrowse, FASTA, TopHat
- Microsoft office, Excel, Powerpont, word, Keynote

### Reference

Name: Dr. Steffen Neumann

**Position:** Co-Speaker MetaCom Center, IPB Halle

**Phone:** +49 (0) 345 5582 1770 **Email:** sneumann@ipb-halle.de