

Statement of Purpose

My name is **Nikita Sudhir Bothare**, and I am applying for the **M.Sc. Molecular and Computational Biology** program at the prestigious **Julius-Maximilians-Universität Würzburg** in Germany. Through this letter, I wish to convey my strong interest and motivation to pursue this course.

I have completed my **Bachelor of Technology in Biotechnology** from Dr. D.Y. Patil Vidyapeeth, Pune, with an impressive **CGPA of 9.65** from June 2019 to June 2023. Before that I secured 90.20% in my Secondary School Certificate in March 2017 and 82.46% in my Higher Secondary Certificate in February 2019. I have also acquired several technical certificates, including an **A1 Certificate in German from Goethe Institut** with a score of 90/100 on August 23, 2017, and a fellowship in Sickle Cell Disease from Adeetechgene Biotech Pvt. Ltd., Pune, from July 2023 to September 2023. Additionally, I have demonstrated my proficiency in English with an **overall band score of 7.5 in the IELTS exam** on October 23, 2023.

My technical skills encompass MS-Office, C Programming, DNA Isolation, Total RNA Isolation, Ligplot+, PubMed, and NCBI-Blast. During my Bachelor's, I undertook an internship at the Department of Microbiology, Savitribai Phule University, Pune, from July 8, 2022, to July 25, 2022, where I acquired practical skills in microbiology techniques. Furthermore, my Bachelor's project focused on "DNA Sequencing and Online RFLPA Tool For Restriction Site Analysis in Sickle Cell Disease," which I worked on from January 2023 to May 2023, allowing me to know more about computational analysis of genetic data.

My motivation to pursue the M.Sc. in Molecular and Computational Biology program stems from my fascination with the intricate workings of the molecular world and the immense potential of computational techniques in untangling biological mysteries. This course perfectly aligns with my interests and aspirations, as it promises to equip me with a comprehensive understanding of molecular aspects in various domains, including cell biology, developmental biology, microbiology, and biophysics.

Furthermore, the program's emphasis on bioinformatics and computational systems biology fits with my goal of exploring the best applications of these techniques in deciphering complex biological systems. Upon completing this program, I aspire to pursue a career in the biotechnology or pharmaceutical industry, where I can contribute to the development of innovative solutions for healthcare challenges. Potential job roles that align with my interests include bioinformatician, computational biologist, molecular biologist, or research scientist. Additionally, I am also open to exploring opportunities in academic research or working in government agencies focused on biomedical research and drug development.

Germany has long been recognized as a global leader in scientific research and innovation, particularly in the fields of molecular biology and computational sciences. The country's commitment to academic excellence and a collaborative research environment makes it an ideal destination for pursuing advanced studies in this domain. Furthermore, Germany's strong biotechnology industry, with numerous multinational companies and research institutions, offers excellent career prospects for graduates in this field. According to recent statistics, the biotechnology sector in Germany employs over 40,000 people. Also, the country recorded an annual turnover of approximately €25.1 billion in 2022 in the Biotechnology sector which further solidified my interest to pursue my studies.

Julius-Maximilians-Universität Würzburg, with its esteemed reputation and global ranking of 175th by the Times Higher Education and 96th in the world for molecular biology by EduRank.org as of February 2024, stands out as an exceptional institution for pursuing this course. The university's research facilities, world-class faculty, and approach to education make it an ideal choice for me. Moreover, the program's emphasis on practical training and involvement in ongoing research projects will provide me with invaluable hands-on experience, preparing me for a successful career in this field.

I am certain that my academic background, technical skills and extensive research experience, make me an excellent candidate for the M.Sc. Molecular and Computational Biology program at Julius-Maximilians-Universität Würzburg. I am eager to contribute to the advancement of knowledge in this dynamic field.

Thank you for considering my application, and I look forward to the opportunity to further discuss my qualifications.

Sincerely,

Nikita Sudhir Bothare