STATEMENT OF PURPOSE

I am **Harsh Bellam**, applying for an MS in **Physics** at **Heidelberg University**. Through this statement of purpose, I want to share my academic success, motivations, and interest in studying physics.

I completed my **Bachelor of Science degree in Physics** at Sathyabama Institute of Science and Technology in Chennai, India from August 2021 to May 2024. My cumulative grade point average **(CGPA) stood at 8.73** out of 10 by the end of the 5th semester. During my journey, I achieved a score of 89.6% in the 10th-grade examination back in May 2019 followed by a score of 93.8% in the 12th-grade examination held in July 2021. Moreover, I successfully attained a **band score of 7.0 (to C1 level) on the International English Language Testing System (IELTS) exam** conducted on April 5, 2024. In this test, I obtained scores of 7.5 for listening, and in the reading, writing, and speaking sections, I scored a mark of 7.0.

During my tenure at the physics department within my college campus, spanning from December 2023 to April this year, I dedicated myself to a bachelor's project titled "**Growth, Characterization, and Analysis of Single Inorganic Crystals with Non-Linear Optical Properties.**" Furthermore, I gained experience through an **internship at VEI TECHNOLOGIES PVT LTD**, located in Tamil Nadu, India, where I actively engaged with the sci.AI platform from June 15th to June 28th. It helps in understanding and explaining biomedical research papers. In addition to academics, I did many extracurricular activities. I got second place in the **Ultimate Badminton Battle at the SMASH SHOWDOWN** event. The Sports Club of my university organized it on March 20, 2024.

I want to pursue this **MS in Physics** as I want to contribute my best to the ever-evolving field of physics. The curriculum includes advanced modules. They cover topics like Theoretical Statistical Physics, Machine Learning and Physics, Particle Physics, Advanced Condensed Matter Physics, and Astronomical Techniques. It is in line with my academic interests and professional goals. I am very interested in exploring how physics and machine learning interact. I believe that by getting in-depth knowledge of this field, I have huge potential for groundbreaking discoveries and innovations. Ultimately, pursuing this course could lead to careers in research, data analysis, or technology.

Germany has a strong focus on physics as the country invests a lot in research and development. It puts about 3.1% of its GDP into R&D. This is one of the highest ratios in the world. Germany is also home to many renowned research institutes. For example, the Max Planck Institute has made big contributions to physics. Furthermore, the German educational system is well known for its excellent standards and pragmatic approach, which guarantees that I will have invaluable practical experience.

Heidelberg University stands out with a rich legacy in physics. It is ranked 87th globally and 43rd for physics by the QS World University Rankings 2024. It is the third-best university in Germany for this subject. The university has top facilities, great faculty, and the best research opportunities. About all this, I feel it is an ideal choice for me to advance my studies and contribute to science.

I am confident that my academic background, curiosity, and determination will help me excel in the MS in Physics program at Heidelberg University. This opportunity will deepen my understanding of the subject. It will also give me the skills and knowledge I need which are essential for a rewarding career in research, academia, or industry. I am eager to start this academic journey with a zeal to contribute to physics through new research and discoveries.

Thank you for considering my application.

Sincerely,

Harsh Bellam