

Letter of Motivation – M.Sc. Web and Data Science

Dear Members of the Admissions Committee,

I am writing to express my strong motivation to apply for the Master of Science in Artificial Intelligence at Technische Hochschule Ingolstadt (THI). I hold a Bachelor's degree in Artificial Intelligence and Data Science from Ajeenkya DY Patil School of Engineering, affiliated with Savitribai Phule Pune University, where I developed proficiency in machine learning, deep learning, data analysis, and intelligent systems. Through consistent academic progress, I was ranked 4th in my seventh semester in the 2025 graduating batch.

My interest in artificial intelligence began early during a robotics camp where I built an Arduino-based obstacle-avoiding robot. This early exposure inspired me to pursue AI academically and professionally. During my undergraduate studies, I explored programming, robotics, algorithms, and advanced data-centric technologies, and I participated in multiple technical workshops and certifications that strengthened my understanding of intelligent computing systems.

To gain practical industrial exposure, I completed an internship at iGurus, where I worked directly under a Data Scientist and contributed to automation and ML-based analytical solutions, including Instagram reach analysis, web scraping using BS4, and backend data processing pipelines. Additionally, I developed AI projects such as Heart Disease Prediction, Student Performance Prediction, and Catching Crooks in the Sea, which enhanced my skills in data preprocessing, visualization, statistical modeling, predictive analytics, and Python-based ML frameworks.

For my final-year thesis, I developed a Smart Nutrient Calculator, an AI-powered system capable of identifying food items from images and extracting nutritional values in real-time. This project used TensorFlow, Keras, and OpenCV, and the results were integrated into a mobile interface built in Flutter, offering personalized diet recommendations based on user health goals. This experience reinforced my passion for computer vision, model deployment, and solving real-world problems using intelligent systems.

I am particularly drawn to the Artificial Intelligence master's program at THI due to its strong research orientation, industry-integrated academic structure, and applied learning environment. The opportunity to study advanced topics such as Deep Learning, Natural Language Processing, Applied Machine Learning, and AI System Implementation aligns perfectly with my academic goals. Furthermore, the presence of AININ (Artificial Intelligence Network Ingolstadt) and collaboration with leading companies such as Audi AG and MediaMarktSaturn Retail Group offers excellent opportunities for real-world exposure, research projects, and internships. I believe that THI's focus on combining theoretical concepts with practical industrial challenges will significantly enhance my competence as an AI professional.

After completing my master's degree, I aspire to work as a Machine Learning Engineer or AI Researcher, contributing to innovative solutions in healthcare, automation, and smart technology development. In the long term, I wish to build affordable AI-based systems that address practical needs in developing regions, improving lives through technology. I am confident that the academic excellence and applied research environment at THI will support my advancement towards these goals.

Thank you for considering my application. I would be honored to join the academic and research community at Technische Hochschule Ingolstadt and contribute meaningfully while growing as an AI professional.

**Sincerely,
Shivraj Jagtap**