

STATEMENT OF PURPOSE

Subject: Request for grant of study visa to pursue Masters of Engineering in Mechatronics and Robotics at Schmalkalden University of Applied Sciences Germany.

Respected Sir / Madam,

I am writing to present a compelling and strong case for my application for a student visa to pursue a Master's degree in Germany. My name is Ridima Gangrade, and I hold a Bachelor of Technology in Mechatronics Engineering from the University of Petroleum and Energy Studies, Dehradun, India. Currently, I serve as the Export Assembly Zone Manager for Harley-Davidson Motor Company at UNO Minda Pvt Ltd, where I bring extensive experience in optimizing operations, improving product quality, and minimizing cycle times in assembly zones. My role involves leveraging my expertise in Value Stream Mapping and mechatronics to enhance efficiency on production lines. Additionally, I am actively involved in an improvement team, working with industrial IoT and implementing AI for safety measures and preventive maintenance systems.

My journey into mechatronics engineering stems from a profound passion for robots and a deep interest in the ever-growing world of technology. During my undergraduate studies, I was inspired by renowned tech companies such as Tesla, FANUC, Siemens, and Rexroth Bosch. This inspiration fueled my commitment to pursuing a career in mechatronics, where I could contribute to the field's innovation and technological advancements. During my summer internship at Hero MotoCorp Magneti Marelli Auto Ltd, I gained hands-on experience with two-wheeler systems, focusing on Electronic Fuel Injection (EFI) and throttle body technologies. Utilizing Simulink, I contributed to the development of models, enhancing my skills in simulation and system modeling. This internship deepened my understanding of control systems and reinforced the importance of sensors and actuators in the automotive industry.

Despite the challenges of a year of online learning, I used the time to refine my skills, collaborating with faculty mentors and seniors on patenting novel concepts in agriculture, medical, and pandemic response sectors. I furthered my knowledge through online courses in KICAD, Arduino, Proteus, IoT, and Embedded Systems, and gained hands-on experience by designing a sustainable system for the agriculture sector and developing a drone and launching system. Engaging with cutting-edge technologies, I worked with 3D printers, laser cutting machines, and analyzed drone flight characteristics in a wind tunnel. As Chairperson of the ASME at UPES, I honed leadership, communication, collaboration, and time management skills. These experiences have prepared me to thrive academically while maintaining a strong sense of social responsibility.

I compassionately immersed myself in community service, dedicating my time to volunteering at orphanages and old age homes. These experiences not only allowed me to make a positive impact on the lives of others but also provided valuable insights into diverse societal needs. This commitment to social work has instilled in me a sense of empathy and teamwork, shaping my desire to utilize my skills and knowledge for the betterment of society. I am confident that these values will complement my academic and professional journey. Raised in a well-educated household, I have maintained a strong academic record and now aspire to deepen my knowledge of robotics.

Germany, with its renowned academic excellence, cutting-edge research environment, and thriving technology industry, is the ideal destination to nurture my passion for mechatronics and robotics. The country's commitment to innovation, interdisciplinary collaboration, and fostering a diverse and inclusive academic community deeply resonates with my aspirations. During my academic journey, I had the opportunity to work extensively with topics such as sensor systems and digital signal processing, applying these concepts in practical projects and embedded system development. These experiences not only honed my technical skills but also sparked a deep interest in further exploring these subjects. The hands-on application of these technologies, along with the insights gained from various publications, made me realize the vast potential and complexity of these fields. When I discovered that the Master's program in Mechatronics and Robotics (MEng) at Schmalkalden University of Applied Sciences includes advanced courses in automation control, vibration engineering, development of mechatronics systems, rapid control prototyping, robotic vision, optics, and lasers, I knew that this curriculum was the perfect fit for my aspirations. The opportunity to gain deeper knowledge in these areas, while also exploring new subjects that have long fascinated me, is precisely what I seek to advance my expertise and career in mechatronics. The University's curriculum is designed to integrate theoretical knowledge with real-world applications, providing students with hands-on experience that is crucial in the rapidly evolving fields of mechatronics and robotics. Its state-of-the-art laboratories and workshops, equipped with the latest technology, offer an ideal environment for students to experiment, innovate, and refine their skills.

I would be very grateful if you would consider my application and grant me a visa to pursue this Master's Program at the prestigious Schmalkalden University of Applied Sciences in Germany. Furthermore, the university will provide me with the opportunity to contribute to the development of innovative solutions that address real-world challenges, ultimately shaping a future where technology plays a pivotal role in improving the quality of life.

Sincerely,
Ridima Gangrade