## LETTER OF MOTIVATION

My Full name is **Surya Natraj, Murugesan** and I am writing to express my interest in pursuing a **Master of Mechatronic and Cyber-Physical Systems at Technische Hochschule Deggendorf**. With the background of a Mechatronics Engineering student, I would like to enhance my skills and knowledge concerning the fields of Mechanics, which I deem pertinent to the evolution of manufacturing and industrial processes in the forthcoming years

I passed my final ICSE- Class 10<sup>th</sup> in 2017 getting 70.5%. and I hold a Diploma Certificate in Mechanical Engineering with a 73.2% from the Department of Technical Education, Government of Karnataka. At present, I am doing my undergraduate program at Visvesvarya Technological University, Belagavi, Karnataka pursuing a degree of Bachelor of Engineering, in Mechanical Engineering having a CGPA of 7. 13 (German Grade – 2. 44) till the 7th semester and I plan to graduate in August 2024. During my studies, I have undertaken internships at the Government Tool Room & Training Centre in Bangalore, focusing on CNC Milling programming and operation, and at the Aeronautical Development Establishment in Bengaluru, where I worked on conceptual designing and modeling of an E.M. actuator and aileron activation system. I have also earned training certificates, including one for participating in Corporate Culture by Dayanand Sagar University and completing a Dynamic Skills Integrated program by CIL Product Development. Additionally, I have been actively involved in extracurricular activities, such as securing positions in drama, basketball, and football competitions. I Completed 17 Years of Education in English.

I'm fascinated by how mechanical and digital systems interact, thus I'd like to study Mechatronic and Cyber-Physical Systems. During my undergraduate studies at Visvesvaraya Technological University, I became especially interested in computer-aided machine drafting, material mechanics, and digital manufacturing. This passion grew deeper during my internships at the Government Tool Room & Training Centre and the Aeronautical Development Establishment, where I worked on projects that required CNC Milling programming and the conceptual design of an E.M. Actuator and Aileron Activation System.

The Master in Mechatronic and Cyber-Physical Systems program at Technische Hochschule Deggendorf is notable for its practical approach and diverse study options. I am particularly interested in the program's concentration on contemporary simulation systems, cooperative and autonomous systems, and innovative Human-Machine Interfaces. Mechatronic and Cyber-Physical Systems present excellent opportunities for everyone who wants to understand and impact the future of technology. Integration of mechanical engineering and digital technology is critical for the progress of industries such as manufacturing, automation, and robots. This dynamic area delivers a career filled with several challenges and opportunities for significant impact.

In the future, I wish to work in an industry where I can help firms develop and implement groundbreaking inventions. I want to apply my experience to help firms succeed on a worldwide scale, particularly robotics, autonomous systems, and smart manufacturing. The study at Technische Hochschule Deggendorf will give me with the knowledge, abilities, and experiences I need to achieve these professional goals.

Technische Hochschule Deggendorf is the best alternative for me to complete this program. The university's significant concentration on applied sciences ensures that students receive both practical and theoretical understanding. The program's international location will allow me to engage with a diverse group of students and faculty, enhancing my learning experience. Furthermore, the university's links with various firms provide possibilities for internships and networking, both of which are critical for my career development.

Technologically and industrially, Germany remains one of the countries that have developed technologically enhanced industrial products. The country is a core producer of engineering and manufacturing, thus offering the best environment for a master's in Mechatronics. Due to the focus on research and development, German institutions uphold high standards of equipment hence offering students a chance to use modern technologies. The country's economy and industrial forefront offer lots of chances for interns and interaction with acclaimed organizations. Being able to study in Germany will make me familiar with a different academic team which will be mostly international, thus promoting tolerance and diversity in teamwork. Also, the investment in sustainable resources and green technologies as the key focus and commitment of Germany, correlate with my principles and interests

I am completely convinced that Master of Mechatronic and Cyber-Physical Systems at Technische Hochschule Deggendorf. program is the best choice for accomplishing both my academic and professional goals. The opportunity to contribute to and gain from Technische Hochschule Deggendorf lively academic community inspires me.

Sincerely, Surya Natraj Murugesan