Lai, Minh Ha Phan Chu Trinh str. 179/23 Buon Ma Thuot City, Daklak province, Viet Nam

International Engineers for Thuringia program Internaltional Office, TU Ilmenau

## Dear Members of the Program Committee,

I am Lai Minh Ha, a 26-year-old software engineer from Viet Nam, and an admitted M.Sc. student in Communication and Signal Processing at TU Ilmenau (starting October 2025). I am eager to join the International Engineers for Thuringia program to deepen my technical expertise and integrate into Thuringia's engineering community.

For my academic and job-related background, I completed a Bachelor of Engineering in Electronics and Telecommunication at Vietnam National University-Ho Chi Minh City University of Technology (VNU-HCMUT). During my undergraduate studies, I completed a six-month internship at Intel Products Vietnam as an engineering intern, where I took on the challenge of building a machine-learning application to detect various defects on Intel's CPU units. Using computer-vision image data from the chip manufacturing factory, my object-detection model achieved more than 80% accuracy. Although the project was tested in a sandbox environment, the experience strengthened my professional work ethic and sharpened my ability to tackle real-world engineering challenges.

After earning my bachelor's degree, I joined DEK Technologies to develop IP Multimedia Subsystem software for Ericsson. Working in an international environment strengthened my English communication skills and taught me to collaborate on complex engineering problems across team members. I then moved to Viettel to help build Viet Nam's first 5G Standalone network, focusing on the Network Exposure Function (NEF) defined by 3GPP. In this role I designed cloud-native microservices that can securely expose the network capabilities to third-party applications and, via CAMARA-compliant APIs, support an open-network platform. While also serving as Scrum Master in an Agile working environment, I established coding guidelines, conducted code reviews, and initially set up the project's GitLab CI/CD pipeline.

For my future studies at TU Ilmenau, I aspire to gain hands-on experience through internships at some of Thuringia's well-known telecommunications companies. Following my master's thesis, I hope to collaborate with these companies on cutting-edge technologies and research into the future of networking systems, aiming for a strong thesis defense. After graduation, I also want to continue my research and build real-world applications, bringing the technical specifications of the 5G-Advanced system—or even the realization of a 6G non-terrestrial network—to mobile users. To ensure a smooth transition and build a lifelong career in Germany, I have already attained an A2 German language certificate from the Goethe-Institut (total score: 89/100), and my goal is to achieve B1 proficiency by the end of my studies so that I can integrate easily into the workplace and daily life.

I am excited about the opportunity to contribute my experience and to grow within Thuringia's innovative technology sector. Thank you for considering my application.

Sincerely, Lai Minh Ha