## Application for Master's program in

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

Faculty of Electrical Engineering and Information Technology Darmstadt University of Applied Sciences Birkenweg 8 64295 Darmstadt Germany

Dear Faculty of Electrical Engineering and Information Technology -Admission board,

My name is Lai Minh Ha, a software engineer with over three years of experience working on various telecommunications projects, including IP Multimedia Subsystem (IMS) and 5G-core system. I'm writing to express my interest in joining your M.Sc. program in Electrical Engineering and Information Technology, especially the Communications major. I completed a B.Eng. in Electronics and Telecommunications from Ho Chi Minh City University of Technology (VNU-HCMUT) with a GPA of 7.29/10 (German equivalent: 2.63) in November 2021, and I am now eager to advance my career by pursuing a master's degree closely aligned with my professional expertise. Through the years, I have gained a solid engineering foundation and invaluable experience from working on projects with some of the telco giants, such as Ericsson (Sweden) and Viettel (Vietnam)—the most valuable Telecoms brand in Southeast Asia. I believe this combination of academic and professional experience makes me a strong candidate for your program.

Through my undergraduate courses, extracurricular activities, and thesis project, I have gained an extensive amount of understanding in the broad subject of electronics and telecommunications. In my third year of university, despite having a GPA of 7/10 at the time, I successfully secured a highly competitive six-month paid internship from Intel Products Vietnam. I was honored to be the only student from my program to receive this offer, which recognized my technical aptitude and potential as a promising engineer.

My professional career in telecommunications as a software engineer has equipped me with valuable expertise in mobile network systems. I started my career with DEK Technologies Vietnam a vendor of Ericsson, where I gained a strong foundation in troubleshooting, technical reasoning, and effectively communicating complex technical issues to multinational colleagues—essential attributes of a competent engineer. After a year and a half contributing to the Call Session Control Function in the IMS project, I joined one of Vietnam's most important telecommunication initiatives: building the first 5G-core standalone system for Viettel, the largest mobile operator in the country. The project launched on the 20th of November 2024 and recorded nearly 3 million users after 15 days of official live.

While exploring the curriculum of the Communications major, I was particularly drawn to the course (I)IoT and Cloud Networking. As IoT is a cornerstone of 5G network, specifically its pillar of Massive Machine-Type Communication (mMTC). This advance technology enable seamless connection between billions of devices, and to future network generations such as 6G, IoT will remain a critical element in advancing global connectivity. While this connectivity drives innovation in smart homes, grids, and industries, it also introduces an expanding attack surface, making modern networks increasingly vulnerable to cyber threats. This is where the Network Security course comes to shine. As I can see, the course material offers students both theoretical understanding and hands-on lab activities to mitigate risks and foster a security-first mindset.

Thank you for your consideration, and for the opportunity of applying to this program. I look forward to hearing from you soon.