



Cybercore Co., Ltd.

12th TNR Tower, 180-192
Nguyen Cong Tru Street,
District 1, Ho Chi Minh City

Website: <https://cybercore.co.jp>



Nguyen Tat Thanh University

331 National Road 1A, An Phu
Dong Ward, District 12, Ho Chi
Minh City

Website: <https://ntt.edu.vn/en>

Letter of Recommendation

For Mr. Thien — PhD Applicant, University of Liverpool

Tang Ngoc Tuan, Master.

CyberCore AI Vietnam
Project Manager and Technical Leader
Email: tuan.tang@cybercore.co.jp

AND

Senior University Lecturer
Faculty of Information Technology
Nguyen Tat Thanh University
Email: tuan.tang@ntt.edu.vn

Ho Chi Minh City, May 20th, 2025.

To whom it may concern,

It is with great pleasure and full confidence that I write this letter in support of Mr. Thien's application to the PhD program at the University of Liverpool. I had the privilege of being Thien's technical leader at BOS Semiconductors Vietnam, a strategic partner of Tenstorrent, where we worked on optimizing AI model inference speeds for next-generation automotive system-on-chips (SoCs) powered by neural processing units (NPUs).

By way of introduction, I hold a Master's degree from Yonsei University and am currently working in two roles: as Project Manager and Technical Leader at CyberCore AI Vietnam, and as a Senior University Lecturer at Nguyen Tat Thanh University.

When I joined BOS Semiconductors, I was tasked with building the AI compiler engineering team from the ground up. Out of more than 100 applicants from top universities across Vietnam, I selected four outstanding individuals. Among them, Thien stood out not only for his technical promise but also for his intellectual curiosity and drive. Despite coming from a chemical engineering background, he demonstrated remarkable ambition to pivot into the field of AI—a transition that many would find daunting.

During his interview, Thien impressed me with his deep understanding of machine learning fundamentals, an evident result of rigorous self-study. He possessed excellent Python programming skills, showed a thoughtful understanding of deep learning architectures, and most strikingly, had the ability to discuss AI modeling optimization topics well beyond the expectations for someone without a formal background in AI. In fact, he remains the most exceptional case I have seen of a candidate mastering a new domain with such speed and depth.

At BOS Semiconductors, Thien started with little to no experience in C++, hardware architecture, or low-level AI inference speed optimization. However, through sheer perseverance and a genuine passion for learning, he quickly acquired and applied knowledge in areas such as Transformer, ResNet, and LSTM architectures; memory tiling and data layout strategies (e.g. NHWC vs NCHW); DMA and buffer management; custom kernel development; and pipeline parallelism. He not only absorbed this information but also contributed meaningfully to the project by proposing algorithmic improvements and model modifications that directly enhanced performance on automotive SoCs.

Throughout the time I worked with Thien at BOS, he was known for his thoughtful presentations, insightful questions, and consistent initiative. His work ethic and learning agility left a lasting impression on both me and our international colleagues, including senior engineers and academics from the United States, Korea, and Vietnam. Despite being a Master's graduate myself, I have had the opportunity to work with many PhD holders, and I am confident in saying that Thien has both the intellect and the discipline to thrive in a doctoral research environment.

While I have great confidence in Thien's abilities, it is worth noting a couple of areas where he is still growing. Firstly, he has not yet had the opportunity to publish academic papers. However, given his analytical mindset, disciplined work ethic, and ability to communicate complex ideas clearly, I am confident that he will be able to produce high-quality research output in the academic setting. Secondly, although Thien possesses a strong background in both chemistry and machine learning, he has not yet worked on a project that directly

combines these two domains. That said, I believe this PhD opportunity at the University of Liverpool will provide the perfect platform for him to bridge that gap. With both areas being his core strengths, I am confident he will adapt quickly and thrive in an interdisciplinary environment.

I give Thien my strongest recommendation for admission to your PhD program. I have no doubt that he will bring dedication, innovation, and a collaborative spirit to your research team.

Should you require any further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Tn' with a stylized flourish underneath.

Tang Ngoc Tuan