School of Computer Science and Technology,
Huazhong University of Science and Technology
Luoyu Road 1037, Wuhan, Hubei, China, 430074
Tel: (+86) 187-5800-9846
E-mail: wanyao@hust.edu.cn
Homepage: wanyao.me

February 5, 2025

To whom it may concern,

This letter is to recommend Mr. Shu Pu to your Ph.D. program.

As for me, I am currently an Associate Professor within the School of Computer Science and Technology at Huazhong University of Science and Technology (HUST), China. My research interests mainly lie in Code Intelligence and Large Language Models. My research has primarily been published in top-tier conferences in Software Engineering, including ICSE, FSE, and ASE, as well as in leading Machine Learning venues such as ICML, NeurIPS, and ICLR. I head the *ONE Lab* with the vision to empower machines to interact with the physical world through one unified natural language interface—Language + X, where X can be code, vision, tables, etc.

Shu joined my *ONE Lab* in June 2024, driven by a strong interest in generative models, particularly Multimodal Large Language Models (MLLMs), diffusion models and 3D modeling. From the moment he joined, I was struck by his exceptional enthusiasm, motivation, and deep curiosity for research. He quickly immersed himself in research-oriented projects, demonstrating both the ability to rigorously generate innovative ideas and the initiative to explore his chosen domains independently. Shu actively engaged in discussions about the latest developments in the field and regularly presented his insights, which were often both thoughtful and impactful.

During his 7-month internship in my lab, Shu achieved great research outcomes. He contributed to 1 paper, serving as the co-first author on it. Notably, his work has been recognized at top-tier conference, ICLR. In my experience at HUST, Shu stands out as one of the brightest and most passionate undergraduate students I have ever mentored. Even as a sophomore, his unwavering research enthusiasm and ability to deliver high-quality work were exceptional. I am confident that his potential will continue to flourish in any future academic or research endeavor.

During his time with us, Shu contributed to research exploring the techniques of MLLMs. He joined and led this project after two months of joining our lab, showing incredible leadership among peers and conducting surveying and experiments to prove his idea. As we moved forward, Shu demonstrated remarkable programming skills, rapidly building prototypes and iteratively improving them through feedback from peers and me. He read papers and conducted research with his teammates independently even without regular meetings to discuss difficulties with me. He can motivatively refine the approach, and evaluate the model's robustness against diverse adversarial scenarios. Targeting ACL, a high-impact conference, Shu took charge of writing manuscripts, skillfully balancing technical rigor with clarity. The dedication and resilience Shu showed throughout this journey were truly commendable, underscoring his passion and aptitude for cutting-edge research.

Based on my observations, Shu is deeply committed to his projects and demonstrates exceptional leadership and mentorship skills. He co-founded ONE Lab with me for undergraduates at HUST. The ideas he shares are consistently timely and aligned with the most critical and relevant topics in the field, reflecting his remarkable ability to identify research trends.

In addition to his focus on specific domains, Shu possesses a broad understanding of Natural Language Processing, Computer Vision, with a particular emphasis on Generative Foundation Models. His ability to bridge these areas of expertise further highlights his versatility and depth as a researcher.

Shu has sets of high academic goals, consistently pursuing impactful and innovative projects that align perfectly with

your program. As Shu's supervisor and the co-founder of ONE Lab, I am confident in his qualifications and his potential to excel in your program. It is with the utmost confidence and without any reservation that I wholeheartedly recommend Shu for admission to your esteemed program.

If you have any questions, please feel free to contact me at the below address.

Best regards,

Yao Wan,
Associate Professor,
School of Computer Science and Technology,
Huazhong University of Science and
Technology, Wuhan, China, 430074
E-mail: wanyao@hust.edu.cn