

2024.10.15

Zuozhou Pan

Associate professor

Address: No. 258, Xueyuan Street, Xiasha Higher Education Zone, Hangzhou, Zhejiang Province

Tel: 15903367297

E-mail: panzz@cjlu.edu.cn

## To Whom It May Concern:

It is my great pleasure to recommend Mr. Wenqi Wang, an outstanding student who studied at our university from 2021 to 2025.

Wenqi Wang is a highly motivated and enthusiastic student with an excellent academic drive. In the Precision Measurement and Instrumentation course that I taught, Wenqi demonstrated exceptional focus and critical thinking. He not only deeply understood the core concepts in class but also frequently discussed cutting-edge technological topics with me outside of class. He often mentioned Tesla's innovations and SpaceX's Starship program, which showcased his deep interest in artificial intelligence and its applications.

One of Wenqi Wang's primary areas of interest is multimodal sensors and their application with deep learning in robotics. His strong passion for artificial intelligence led him to explore advanced topics in machine learning and computer vision. He demonstrated great self-learning ability, mastering both the concepts and practical applications of artificial intelligence. His proficiency in working with classic models like YOLOv5, AlexNet, and MobileNet not only highlights his technical skills but also proves his capability to effectively solve complex AI challenges.

Notably, Wenqi also excelled in real-world projects. He cloned the open-source YOLOv5 code from GitHub through the WSL2 Ubuntu 22.04 subsystem. To ensure the project ran smoothly, he created an independent Python environment, demonstrating his deep understanding of the importance of setting up independent environments in deep learning, especially when handling dependency packages. Mishandling such issues could easily lead to project failures. By installing the required dependencies, Wenqi successfully resolved multiple environment conflicts and completed the installation effectively.

In terms of hardware, Wenqi used a high-performance laptop with ample memory and a powerful NVIDIA graphics card to train YOLOv5 and other classic models (such as AlexNet and MobileNetV2) locally. He deployed and trained models using VOC and other open-source datasets for experiments. After extensive training, he generated charts reflecting the training process and results. Through these projects, Wenqi not only



deepened his understanding of deep learning models but also demonstrated his strong capabilities in model training, deployment, and inference.

Wang is highly dedicated to both theory and practice. He actively follows research reports from international AI forums and has gained insight into Professor Andrew Ng's optimistic vision regarding running large language models locally and the promising future of autonomous agents. With this in mind, Wang decided to construct a simple AI assistant on his local machine. He has successfully deployed the open-source LLaMA3 7B model on his high-performance laptop and further built a personal knowledge base. By employing the Retrieval-Augmented Generation (RAG) method, he constructed an efficient, professional, and customizable AI assistant, enhancing the retrieval and consolidation of his personal knowledge graph.

Unlike the standalone environments previously built with Anaconda, Wang used Docker to create a dedicated container for downloading and running the LLaMA3 7B model. Through Python scripts, he designed an entire workflow to reduce the hallucination problem of the model. Moreover, by integrating automatic calls to external website APIs, Wang was able to stay informed and read various local files efficiently.

In my course, Wenqi's academic performance was outstanding. He achieved a written exam score of 84 and a final grade of 90, placing him among the top students in the class. His critical thinking, deep understanding of precision measurement, and passion for artificial intelligence made him an exemplary student. His participation in a study abroad program in Hong Kong further expanded his global perspective and enabled him to analyze technological development trends from an international standpoint.

In conclusion, Wengi Wang has shown exceptional potential in artificial intelligence and its applications in robotics. His passion for learning, independent thinking, and innovative spirit set him apart from his peers. I firmly believe that whether in academic research or his professional career, Wenqi will continue to achieve great success and make significant contributions to the field of artificial intelligence and related areas.

For more detailed information, please visit Wenqi Wang's personal website: www.wangwenqian.website.

Sincerely,

Associate professor Pan

Signature: Jan Zuzhou