Dear Admissions Committee,

I am pleased to write on behalf of my former student, Mr. Chi-Yao Huang, who is eager to enhance his knowledge of computer science by applying to your program. I supervised Chi-Yao master’s thesis from 2015 to 2017.

Different from the rest of my students majoring in Mechanical Engineering, Chi-Yao has command of both computer vision and automatic control. His unique background affords him the ability to easily acquire success in robotics. In the Robotics Lab of National Taiwan University, Chi-Yao initially focused on the zero moment point design of humanoid (biped) robot. However, he discovered his interest and passion for computer vision and robot perception. He performed well in a project entitled “3D Reconstruction and Path Planning with Signed Distance Function.” In the project, we constructed a vivid 3D map using Kinect as the sensor, implementing the iterative closest point to determine the frame pose, and using voxel data structure to obtain information from the environment. Moreover, the mapping results were combined with an exclusive path planning method of our laboratory, i.e., DDAO\*. Notably, Chi-Yao not only presented diverse theories but also exhibited his practical ability.

Furthermore, Chi-Yao was the vice system manager of our laboratory from 2015 to 2017. He handled many events in our laboratory. For example, Chi-Yao was responsible for scheduling and designing the bridge courses for new members of our laboratory. Regularly holding gatherings, managing the equipment in our laboratory, and preparing for meetings were all his responsibilities, and he accomplished them with high efficiency. Moreover, Chi-Yao liked to share his knowledge and conduct discussions with the members of our laboratory. Although Chi-Yao has left our laboratory, he kept in touch with our members and generously shared his work experience. Apparently, Chi-Yao showed both responsibility and passion for research.

On the basis of Chi-Yao’s achievements and growth in my laboratory, I am convinced that his background in both computer vision and automatic control, enthusiasm for knowledge, and ability to resolve problems will contribute to his success in the future. He will certainly become a valuable asset to your institution. In my opinion, Chi-Yao is a worthy candidate for advanced training, and I have no hesitation to recommend him to you.

Sincerely,

Distinguished Professor Han-Pang Huang

Department of Mechanical Engineering

National Taiwan University