Dear Admissions Committee,

I am proud to provide this letter of recommendation for Chi-Yao Huang, who is applying to the program of your institute. As Chi-Yao’s supervisor at HTC VIVE for approximately 3 years, we worked closely on developing COSMOS, the latest VR product of HTC VIVE. He is hardworking, well spoken, and fulfilled with passion for research.

Chi-Yao was a rare fresh graduate who had sufficient knowledge of computer vision when he was recruited to HTC VIVE in 2017. He quickly showed his talent and passion for research. Initially, Chi-Yao built the bridge between computer vision and IMU algorithm. He used the information from IMU fusion to compute the direction of gravity and calibrated the coordinates of the VR world. He also used the IMU result as the prior state in computer vision state estimation and help rapidly obtained a converse result. Moreover, Chi-Yao shared his background knowledge of optimization with our team. He improved the state estimation of our algorithm to enable the multiple camera optimization process and modified the operation using the Lie algebra. He efficiently handled the problem where the algorithm of our device would lose its tracking capability when some cameras are covered. As a result, its robustness was definitely improved by Chi-Yao’s contribution.

A year later, Chi-Yao was promoted to senior engineer, and he started some independent projects. In the transition period, he was assigned to conduct IMU integration and fuse it with our SLAM algorithm. Given his communication skills and independent research ability, Chi-Yao was responsible for other independent products that will be launched in the future. He exhibited exceptional performance until he left HTC VIVE.

In addition, Chi-Yao was passionate about computer vision research. He often surveyed the latest information. Moreover, he not only benefited himself but also shared these papers or online courses with our team members, which helped improve the knowledge of our colleagues and the techniques of our company.

To conclude, Chi-Yao demonstrated all essential qualities for advanced research studies. I believe that he would be an outstanding addition to your program. Therefore, I would like to emphasize my strong support for Chi-Yao’s application.

Sincerely,

Hebbel Chao

Manager of Advanced and Creativity SLAM Team

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