Dear Prof. Shaojie Shen,

Hope this email finds your best.

I am a final-year student at the Hong Kong Polytechnic University, major in Electronic and Information Engineering. I am applying the MPhil and PhD program in the field of robotics. After glancing the video on VINS-Mono and the Survey on Aerial Swarm Robotics, I find the research projects at HKUST Aerial Robotics Group are super interesting. Will you be taking on new students next year? Could I make an appointment to meet with you?

This summer, I worked in Robot Perception Lab at Carnage Mellon University with Dr. Lipu Zhou and Prof. Michael Kaess. I developed a Matlab tool for camera and 3D LiDAR extrinsic calibration based on their last paper, *Automatic Extrinsic Calibration of a Camera and a 3D LiDAR using Line and Plane Correspondences*. I focused on the feature extraction part of the whole system. The toolbox will be available at the end of this year.

The 3-months experience at CMU gave me an overview about robotic perception, let me have a deep understand on how camera and LiDAR work, what is SLAM and why we need to do the state estimation. I hope I can develop my own localization and mapping system using UAV in my graduate study. I believe my research experience in computer vision and working experience in embedded system can let me learn fast in this filed. The attachment is my CV including my related research experience and my one-year internship in ASM Pacific Technology. Hope you could take some time to read it and give me a chance to meet with you.

Thank you so much for your time.

Best regards,

Jiawei Tang