Personal Statement

Yuming Chen

1 Why I want to work with you

My research interests lie in **human-centric computer vision** (and reinforcement learning (RL)). I am particularly interested in generative models for interaction-rich problems, such as multi-body HOI generation and multi-person motion generation. Additionally, further applications in human-AI interaction in the real world, including VLA, and related topics also attract me.

My experiences and research interests align well with your excellent works in computational humans. Your recent impressive paper It Takes Two: Real-time Co-Speech Two-person's Interaction Generation via Reactive Auto-regressive Diffusion Model inspired me a lot and it closely related to one topic (see sec.3) I plan to study. I am knee-deep to explore the topic under your guidance.

2 Related Experiences

During my MSc, I conducted published work on 3D hand mesh reconstruction. Besides, I tried to train grasping policy for dexterous hand in simulators (MuJoCo and Raisim). Previously, I also have experience in multi-agent reinforcement learning (MARL), which will be helpful for potential simulator-involved or interaction-rich researches.

3 Future Work

I am interested in all human-centric topics and currently (personally) studying on **Number-free person motion generation in a streaming / online manner**. It is similar to *It Takes Two* but focuses on the interaction of arbitrary number of people and can utilise other modalities. To best of my knowledge, there has been few work proposes the task.