

# Stanford

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## Pei Xu

Postdoctoral Scholar, Computer Science

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### Bio

#### STANFORD ADVISORS

- Karen Liu, Postdoctoral Faculty Sponsor

#### LINKS

- Personal Website: <https://pei-xu.github.io>

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### Research & Scholarship

#### CURRENT RESEARCH AND SCHOLARLY INTERESTS

character animation, physics-based character control, crowd simulation

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### Publications

#### PUBLICATIONS

- **AdaptNet: Policy Adaptation for Physics-Based Character Control** *ACM TRANSACTIONS ON GRAPHICS*  
Xu, P., Xie, K., Andrews, S., Kry, P. G., Neff, M., McGuire, M., Karamouzas, I., Zordan, V.  
2023; 42 (6)
- **Mask R-CNN provides efficient and accurate measurement of chondrocyte viability in the label-free assessment of articular cartilage.** *Osteoarthritis and cartilage open*  
Fan, H., Xu, P., Chen, X., Li, Y., Zhang, Z., Hsu, J., Le, M., Ye, E., Gao, B., Demos, H., Yao, H., Ye, T.  
2023; 5 (4): 100415
- **Context-Aware Timewise VAEs for Real-Time Vehicle Trajectory Prediction** *IEEE ROBOTICS AND AUTOMATION LETTERS*  
Xu, P., Hayet, J., Karamouzas, I.  
2023; 8 (9): 5440-5447
- **Composite Motion Learning with Task Control**  
Xu, P., Shang, X., Zordan, V., Karamouzas, I.  
ASSOC COMPUTING MACHINERY.2023
- **Too Stiff, Too Strong, Too Smart: Evaluating Fundamental Problems with Motion Control Policies** *PROCEEDINGS OF THE ACM ON COMPUTER GRAPHICS AND INTERACTIVE TECHNIQUES*  
Xie, K., Xu, P., Andrews, S., Zordan, V. B., Kry, P. G.  
2023; 6 (3)
- **SocialVAE: Human Trajectory Prediction Using Timewise Latents**  
Xu, P., Hayet, J., Karamouzas, I., Avidan, S., Brostow, G., Cisse, M., Farinella, G. M., Hassner, T.  
SPRINGER INTERNATIONAL PUBLISHING AG.2022: 511-528

- **Automated chondrocyte viability analysis of articular cartilage based on deep learning segmentation and classification of two-photon microscopic images**  
Fan, H., Xu, P., Le, M., Hsu, J., Chen, X., Li, Y., Zhang, Z., Gao, B., Woolf, S., Ye, T., Brown, T. G., Wilson, T., Waller, et al  
SPIE-INT SOC OPTICAL ENGINEERING.2022
- **A GAN-Like Approach for Physics-Based Imitation Learning and Interactive Control** *PROCEEDINGS OF THE ACM ON COMPUTER GRAPHICS AND INTERACTIVE TECHNIQUES*  
Xu, P., Karamouzas, I.  
2021; 4 (3)
- **Human-Inspired Multi-Agent Navigation using Knowledge Distillation**  
Xu, P., Karamouzas, I., IEEE  
IEEE.2021: 8105-8112