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| **Title** | Prof./Dr. | **Name** | Mingliang Xu | D:\已备份\我的信息档案\徐明亮红底照片.jpg |
| **Subject** | Software Engineering | **Research Interest** | Artificial Intelligence and Virtual Reality |
| **E-mail** | [iexumingliang@zzu.edu.cn](mailto:iexumingliang@zzu.edu.cn) | **Tel** | 86-17603858700 |
| **Educational Background** | Dr. Mingliang Xu is a professor in the School of Information Engineering of Zhengzhou University, China. He received his Ph.D. degree in computer science and technology from the State Key Lab of CAD&CG at Zhejiang University, Hangzhou, China, and the B.S. and M.S. degrees from the Computer Science Department, Zhengzhou University, Zhengzhou, China, respectively. | | | |
| **Working Experiences** | He previously worked at the department of information science of NSFC(National Natural Science Foundation of China), Mar.2015-Feb.2016. His current research interests include computer graphics, multimedia and artificial intelligence. He has authored more than 40 journal and conference papers in these areas, including ACM TOG, IEEE TPAMI, IEEE TIP, IEEE TCYB, IEEE TCIAIG, ACM SIGGRAPH (Asia), ACM MM, ICCV, etc. He is a member of IEEE and ACM, and the general secretary of ACM SIGAI CHINA CHAPTER. | | | |
| **Research Projects** | [01] Research and Industrialization Application Demonstration of Key Technology in Interactive Augmented Reality Virtual Learning Environment for the Popular Science Products and Services. Support by the National Key Technology Research and Development Program of China, Jan.2013-Dec.2015. Award Number: 2013BAH23F01. PI  [02] An Algorithmic Exploration of 3D Animation Simulation for Stampede in High-dense Crowd with Panic. Support by NSFC(National Natural Science Foundation of China), Jan.2013-Dec.2015. Award Number: 61202207. PI  [03] A Game Theoretic Model for Autonomous Harmonic Traffic Control and Its Simulation-based Validation. Support by NSFC(National Natural Science Foundation of China), Jan.2015-Dec.2018. Award Number: 61472370. PI  [04] Psychology-based and data-driven violent crowd behavior simulation and animation. Support by NSFC(National Natural Science Foundation of China), Jan.2017-Dec.2020. Award Number: 61672469. PI | | | |
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| **Selected Publications** | [1] **Mingliang Xu**, Chunxu Li, Pei Lv, Lin Nie, Rui Hou, Bing Zhou. An Efficient Method of Crowd Aggregation Computation in Public Areas. ***IEEE Transactions on Circuits and Systems for Video Technology***, DOI: [10.1109/TCSVT.2017.2731866](https://doi.org/10.1109/TCSVT.2017.2731866), 2017, to appear.  [2] **Mingliang Xu**, Hao Fang, Pei Lv, Lisha Cui, Shuo Zhang, Bing Zhou. D-STC：Deep learning with Spatio-Temporal Constraints for Train drivers Detection from Videos. ***Pattern Recognition Letters***, <https://doi.org/10.1016/j.patrec.2017.09.040>, 2017, to appear.  [3] **Mingliang Xu**, Mingyuan Li, Weiwei Xu, Zhigang Deng, Yin Yang, Kun Zhou. Interactive Mechanism Modeling from Multi-view Images. ***ACM Transactions on Graphics*** (SIGGRAPH Asia 2016), 35(6): Article 236, 2016.  [4] **Mingliang Xu**, Jiejie Zhu, Pei Lv, Bing Zhou, Marshall Tappen, Rongrong Ji. Learning-based Shadow Recognition and Removal from Monochromatic Natural Images. ***IEEE Transactions on Image Processing***, 26(12):5811-5824, 2017.  [5] **Mingliang Xu**, Yunpeng Wu, Yangdong Ye, Illes Farkas, Hao Jiang, Zhigang Deng. Collective Crowd Formation Transform with Mutual Information-Based Runtime Feedback. ***Computer Graphics Forum***, 34(1): 60-73, 2015.  [6] **Mingliang Xu**, Yunpeng Wu, Pei Lv, Hao Jiang, Mingxuan Luo, and Yangdong Ye. miSFM: On combination of Mutual Information and Social Force Model towards simulating crowd evacuation. ***Neurocomputing***, 168: 529-537, 2015.  [7] **Mingliang Xu**, Hao Jiang, Xiaogang Jin, Zhigang Deng. Crowd Simulation and Its Applications: Recent Advances. ***Journal of Computer Science and Technology***, 29(5): 799-811, 2014.  [8] **Mingliang Xu**, Zhigeng Pan, Mingmin Zhang, Pei Lv, Pengyu Zhu, Yangdong Ye, Wei Song. Behavior Planning and Visual Simulation of Characters in Virtual 3D Space. ***IEEE Multimedia***, 20(1): 49-59, 2013.  [9] **Mingliang Xu**, Huansen Li, Pei Lv, Wenzhi Chen, Zhigeng Pan. L4RW: Laziness-based Realistic Real-time Responsive Rebalance in Walking. ***Computer Graphics Forum***, 29(7):2187-2196, 2010.  [10] **Mingliang Xu**, Zhigeng Pan, Hongxing Lu, Yangdong Ye, Abdennour El Rhalibi. Moving-Target Pursuit Algorithm Using Improved Tracking Strategy. ***IEEE Transactions on Computational Intelligence and AI in Games***,2(1):27-39, 2010. | | | |