# Julien Pettré

## List of Publications by Year in descending order

| 65 papers | 2,405 citations | 331670 21 h-index | 265206 42 g-index |
|---|---|---|---|
| 68 all docs | 68 docs citations | 68 times ranked | 1135 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | A synthetic-vision based steering approach for crowd simulation. ACM Transactions on Graphics, 2010, 29, 1-9. | 7.2 | 204 |
| 2 | Pedestrian Reactive Navigation for Crowd Simulation: a Predictive Approach. Computer Graphics Forum, 2007, 26, 665-674. | 3.0 | 198 |
| 3 | Social Ways: Learning Multi-Modal Distributions of Pedestrian Trajectories With GANs. , 2019, , . | | 163 |
| 4 | Properties of pedestrians walking in line: Fundamental diagrams. Physical Review E, 2012, 85, 036111. | 2.1 | 136 |
| 5 | Experiment-based modeling, simulation and validation of interactions between virtual walkers. , 2009, , . | | 135 |
| 6 | Parameter estimation and comparative evaluation of crowd simulations. Computer Graphics Forum, 2014, 33, 303-312. | 3.0 | 117 |
| 7 | An Efficient Acyclic Contact Planner for Multiped Robots. IEEE Transactions on Robotics, 2018, 34, 586-601. | 10.3 | 99 |
| 8 | Minimal predicted distance: A common metric for collision avoidance during pairwise interactions between walkers. Gait and Posture, 2012, 36, 399-404. | 1.4 | 97 |
| 9 | Realistic following behaviors for crowd simulation. Computer Graphics Forum, 2012, 31, 489-498. | 3.0 | 95 |
| 10 | Collision avoidance between two walkers: Role-dependent strategies. Gait and Posture, 2013, 38, 751-756. | 1.4 | 86 |
| 11 | Properties of pedestrians walking in line. II. Stepping behavior. Physical Review E, 2012, 86, 046111. | 2.1 | 75 |
| 12 | Going Through, Going Around: A Study on Individual Avoidance of Groups. IEEE Transactions on Visualization and Computer Graphics, 2015, 21, 520-528. | 4.4 | 70 |
| 13 | Virtual proxemics: Locomotion in the presence of obstacles in large immersive projection environments. , 2015, , . | | 56 |
| 14 | Kinematic Evaluation of Virtual Walking Trajectories. IEEE Transactions on Visualization and Computer Graphics, 2013, 19, 671-680. | 4.4 | 55 |
| 15 | Crowd patches. , 2009, , . | | 53 |
| 16 | WarpDriver. ACM Transactions on Graphics, 2016, 35, 1-11. | 7.2 | 51 |
| 17 | Gradient-based steering for vision-based crowd simulation algorithms. Computer Graphics Forum, 2017, 36, 337-348. | 3.0 | 43 |
| 18 | How do walkers avoid a mobile robot crossing their way?. Gait and Posture, 2017, 51, 97-103. | 1.4 | 38 |

| # | Article | IF | Citations |
|---|---------|----|-----------| 
| 19 | Walking with Virtual People: Evaluation of Locomotion Interfaces in Dynamic Environments. IEEE Transactions on Visualization and Computer Graphics, 2018, 24, 2251-2263. | 4.4 | 38 |
| 20 | A Virtual Reality Platform to Study Crowd Behaviors. Transportation Research Procedia, 2014, 2, 114-122. | 1.5 | 36 |
| 21 | Collision Avoidance Behavior between Walkers: Global and Local Motion Cues. IEEE Transactions on Visualization and Computer Graphics, 2018, 24, 2078-2088. | 4.4 | 33 |
| 22 | Guided by gaze: Prioritization strategy when navigating through a virtual crowd can be assessed through gaze activity. Acta Psychologica, 2018, 190, 248-257. | 1.5 | 32 |
| 23 | A synthetic-vision based steering approach for crowd simulation. , 2010, , . | | 31 |
| 24 | Studying Gaze Behaviour during Collision Avoidance with a Virtual Walker: Influence of the Virtual Reality Setup. , 2019, , . | | 30 |
| 25 | Algorithms for Microscopic Crowd Simulation: Advancements in the 2010s. Computer Graphics Forum, 2021, 40, 731-754. | 3.0 | 29 |
| 26 | Group Modeling: A Unified Velocity‐Based Approach. Computer Graphics Forum, 2017, 36, 45-56. | 3.0 | 26 |
| 27 | Effect of Virtual Human Gaze Behaviour During an Orthogonal Collision Avoidance Walking Task. , 2018, , . | | 24 |
| 28 | Crowd sculpting: A space‐time sculpting method for populating virtual environments. Computer Graphics Forum, 2014, 33, 351-360. | 3.0 | 22 |
| 29 | Motion planning and autonomy for virtual humans. , 2008, , . | | 21 |
| 30 | How do walkers behave when crossing the way of a mobile robot that replicates human interaction rules?. Gait and Posture, 2018, 60, 188-193. | 1.4 | 20 |
| 31 | 2PAC. ACM Transactions on Graphics, 2018, 37, 1-14. | 7.2 | 18 |
| 32 | Character navigation in dynamic environments based on optical flow. Computer Graphics Forum, 2019, 38, 181-192. | 3.0 | 18 |
| 33 | Generalized Microscropic Crowd Simulation using Costs in Velocity Space. , 2020, , . | | 18 |
| 34 | YaQ: An Architecture for Real-Time Navigation and Rendering of Varied Crowds. IEEE Computer Graphics and Applications, 2009, 29, 44-53. | 1.2 | 17 |
| 35 | Perceptual effect of shoulder motions on crowd animations. ACM Transactions on Graphics, 2016, 35, 1-10. | 7.2 | 16 |
| 36 | Data-Driven Crowd Simulation with Generative Adversarial Networks. , 2019, , . | | 15 |

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|---|---------|-----|-----------|
| 37 | Reconstructing Motion Capture Data for Human Crowd Study. Lecture Notes in Computer Science, 2011, , 365-376. | 1.3 | 14 |
| 38 | A Reachability-Based Planner for Sequences of Acyclic Contacts in Cluttered Environments. Springer Proceedings in Advanced Robotics, 2018, , 287-303. | 1.3 | 12 |
| 39 | Optimization-based Pedestrian Model Calibration for Evaluation. Transportation Research Procedia, 2014, 2, 228-236. | 1.5 | 9 |
| 40 | Energy-efficient mid-term strategies for collision avoidance in crowd simulation. , 2015, , . | | 9 |
| 41 | EACS: Effective Avoidance Combination Strategy. Computer Graphics Forum, 2017, 36, 108-122. | 3.0 | 9 |
| 42 | From HRI to CRI: Crowd Robot Interaction—Understanding the Effect of Robots on Crowd Motion. International Journal of Social Robotics, 2022, 14, 631-643. | 4.6 | 9 |
| 43 | Crowd Navigation in VR: Exploring Haptic Rendering of Collisions. IEEE Transactions on Visualization and Computer Graphics, 2022, 28, 2589-2601. | 4.4 | 9 |
| 44 | Time-delayed follow-the-leader model for pedestrians walking in line. Networks and Heterogeneous Media, 2015, 10, 579-608. | 1.1 | 9 |
| 45 | Analysis of emergent patterns in crossing flows of pedestrians reveals an invariant of 'stripe' formation in human data. PLoS Computational Biology, 2022, 18, e1010210. | 3.2 | 9 |
| 46 | Crowd art. , 2015, , . | | 8 |
| 47 | Eye-Gaze Activity in Crowds: Impact of Virtual Reality and Density. , 2020, , . | | 8 |
| 48 | Eye-Gaze Activity in Crowds: Impact of Virtual Reality and Density. , 2020, , . | | 8 |
| 49 | Interaction Fields: Intuitive Sketch‐based Steering Behaviors for Crowd Simulation. Computer Graphics Forum, 2022, 41, 521-534. | 3.0 | 8 |
| 50 | A Survey on Reinforcement Learning Methods in Character Animation. Computer Graphics Forum, 2022, 41, 613-639. | 3.0 | 8 |
| 51 | A Perceptually-Validated Metric for Crowd Trajectory Quality Evaluation. Proceedings of the ACM on Computer Graphics and Interactive Techniques, 2021, 4, 1-18. | 1.6 | 7 |
| 52 | Collision Avoidance With Multiple Walkers: Sequential or Simultaneous Interactions?. Frontiers in Psychology, 2018, 9, 2354. | 2.1 | 6 |
| 53 | Influence of path curvature on collision avoidance behaviour between two walkers. Experimental Brain Research, 2021, 239, 329-340. | 1.5 | 6 |
| 54 | Synchronizing navigation algorithms for crowd simulation via topological strategies. Computers and Graphics, 2020, 89, 24-37. | 2.5 | 5 |

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|---|---------|-----|-----------|
| 55 | OpenTraj: Assessing Prediction Complexity in Human Trajectories Datasets. Lecture Notes in Computer Science, 2021, , 566-582. | 1.3 | 5 |
| 56 | Connecting Global and Local Agent Navigation via Topology. , 2019, , . | | 5 |
| 57 | Attracted by light: vision-based steering virtual characters among dark and light obstacles. , 2019, , . | | 4 |
| 58 | Authoring Virtual Crowds: A Survey. Computer Graphics Forum, 2022, 41, 677-701. | 3.0 | 4 |
| 59 | Following behaviors. , 2014, , . | | 3 |
| 60 | Following Behaviors: A Model for Computing Following Distances. Transportation Research Procedia, 2014, 2, 424-429. | 1.5 | 3 |
| 61 | Human Inspired Effort Distribution During Collision Avoidance in Human-Robot Motion. , 2018, , . | | 3 |
| 62 | The One-Man-Crowd: Single User Generation of Crowd Motions Using Virtual Reality. IEEE Transactions on Visualization and Computer Graphics, 2022, 28, 2245-2255. | 4.4 | 3 |
| 63 | Effective Human-Robot Collaboration in near symmetry collision scenarios. , 2019, , . | | 2 |
| 64 | Perception of Motion Variations in Large-Scale Virtual Human Crowds. , 2021, , . | | 1 |
| 65 | Dynamic Combination of Crowd Steering Policies Based on Context. Computer Graphics Forum, 2022, 41, 209-219. | 3.0 | 0 |