

References

- [1] “1x1 lego block,” <https://www.lego.com/en-us/product/lego-storage-brick-1-yellow-5004898>, accessed: October 2021.
- [2] T. Amada, M. Imura, Y. Yasumuro, Y. Manabe, and K. Chihara, “Particle-based fluid simulation on gpu,” in *ACM workshop on general-purpose computing on graphics processors*, vol. 41. Citeseer, 2004, p. 42.
- [3] J. U. Brackbill, D. B. Kothe, and H. M. Ruppel, “Flip: a low-dissipation, particle-in-cell method for fluid flow,” *Computer Physics Communications*, vol. 48, no. 1, pp. 25–38, 1988.
- [4] R. Bridson, *Fluid simulation for computer graphics*. CRC press, 2015.
- [5] N. Chentanez and M. Müller, “Real-time eulerian water simulation using a restricted tall cell grid,” in *ACM Siggraph 2011 Papers*, 2011, pp. 1–10.
- [6] christopherbatty, “SDFGen,” <https://github.com/christopherbatty/SDFGen>, 2015.
- [7] B. O. Community, *Blender - a 3D modelling and rendering package*, Blender Foundation, Stichting Blender Foundation, Amsterdam, 2018. [Online]. Available: <http://www.blender.org>
- [8] M. Desbrun and M.-P. Gascuel, “Smoothed particles: A new paradigm for animating highly deformable bodies,” in *Computer Animation and Simulation’96*. Springer, 1996, pp. 61–76.
- [9] N. Foster and R. Fedkiw, “Practical animation of liquids,” in *Proceedings of the 28th annual conference on Computer graphics and interactive techniques*, 2001, pp. 23–30.
- [10] N. Foster and D. Metaxas, “Realistic animation of liquids,” *Graphical models and image processing*, vol. 58, no. 5, pp. 471–483, 1996.

- [11] —, “Modeling water for computer animation,” *Communications of the ACM*, vol. 43, no. 7, pp. 60–67, 2000.
- [12] F. H. Harlow, “The particle-in-cell method for numerical solution of problems in fluid dynamics,” Los Alamos Scientific Lab., N. Mex., Tech. Rep., 1962.
- [13] F. H. Harlow and J. E. Welch, “Numerical calculation of time-dependent viscous incompressible flow of fluid with free surface,” *The physics of fluids*, vol. 8, no. 12, pp. 2182–2189, 1965.
- [14] M. Müller, D. Charypar, and M. H. Gross, “Particle-based fluid simulation for interactive applications.” in *Symposium on Computer animation*, 2003, pp. 154–159.
- [15] rlguy, “FLIPViscosity3D,” <https://github.com/rlguy/FLIPViscosity3D>, 2018.
- [16] F. Salomonsson, “Pic/flip fluid simulation using block-optimized grid data structure,” 2011.
- [17] A. Sherstyuk, “Kernel functions in convolution surfaces: a comparative analysis,” *The Visual Computer*, vol. 15, no. 4, pp. 171–182, 1999.
- [18] J. R. Shewchuk *et al.*, “An introduction to the conjugate gradient method without the agonizing pain,” 1994.
- [19] L. F. Silva, V. F. Pamplona, and J. L. Comba, “Legolizer: a real-time system for modeling and rendering lego representations of boundary models,” in *2009 XXII Brazilian Symposium on Computer Graphics and Image Processing*. IEEE, 2009, pp. 17–23.
- [20] J. Stam, “Stable fluids,” in *Proceedings of the 26th annual conference on Computer graphics and interactive techniques*, 1999, pp. 121–128.
- [21] “The Stanford 3D Scanning Repository,” <http://graphics.stanford.edu/data/3Dscanrep/>.
- [22] J. Tan and X. Yang, “Physically-based fluid animation: A survey,” *Science in China Series F: Information Sciences*, vol. 52, no. 5, pp. 723–740, 2009.
- [23] G. Van Rossum and F. L. Drake Jr, *Python reference manual*. Centrum voor Wiskunde en Informatica Amsterdam, 1995.

- [24] J. Zadick, B. Kenwright, and K. Mitchell, “Integrating real-time fluid simulation with a voxel engine,” *The Computer Games Journal*, vol. 5, no. 1, pp. 55–64, 2016.
- [25] ———, “Integrating real-time fluid simulation with a voxel engine,” *The Computer Games Journal*, vol. 5, no. 1, pp. 55–64, 2016.
- [26] Y. Zhu and R. Bridson, “Animating sand as a fluid,” *ACM Transactions on Graphics (TOG)*, vol. 24, no. 3, pp. 965–972, 2005.