Reference List for 15-464 / 15-664 March 24, 2021

We started by talking about the following paper related to collision detection using signed distance fields.

Macklin, Miles, Kenny Erleben, Matthias Müller, Nuttapong Chentanez, Stefan Jeschke, and Zach Corse. "Local Optimization for Robust Signed Distance Field Collision." *Proceedings of the ACM on Computer Graphics and Interactive Techniques* 3, no. 1 (2020): 1-17.
https://dl.acm.org/doi/10.1145/3384538
https://www.youtube.com/watch?v=icU6Bm-HZ-E

We then moved on to a preview of character simulation (with a little bit of optimization and control).   The three papers we covered were these:

Song, Seungmoon, and Hartmut Geyer. "A neural circuitry that emphasizes spinal feedback generates diverse behaviours of human locomotion." The Journal of physiology 593, no. 16 (2015): 3493-3511.   https://www.cs.cmu.edu/~hgeyer/Research_MotorControl.html

Fang, Anthony C., and Nancy S. Pollard. "Efficient synthesis of physically valid human motion." ACM Transactions on Graphics (TOG) 22, no. 3 (2003): 417-426.
http://graphics.cs.cmu.edu/nsp/projects/spacetime/spacetime.html

Geijtenbeek, Thomas, Michiel Van De Panne, and A. Frank Van Der Stappen. "Flexible muscle-based locomotion for bipedal creatures." ACM Transactions on Graphics (TOG) 32, no. 6 (2013): 1-11.   https://dl.acm.org/doi/10.1145/2508363.2508399
https://www.youtube.com/watch?v=pgaEE27nsQw

I also mentioned the joke SIGGRAPH paper on raytracing Jello. You can find it here:
https://dl.acm.org/doi/10.1145/37401.37411