

The following document lists the sources of documents on which this research was based.

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3. Breen, D.E., House, D.H. and Getto, P.H., 1992. A physically-based particle model of woven cloth. *The Visual Computer*, 8(5), pp.264-277.
4. Hahn, F., Thomaszewski, B., Coros, S., Sumner, R., Cole, F., Meyer, M., DeRose, T. and Gross, M., 2014. Subspace clothing simulation using adaptive bases. *ACM Transactions on Graphics*, 33 (4), 1-9.
5. House, D.H. and Breen, D.E., 2000. Cloth modeling and animation. AK Peters, Ltd..
6. Haumann, D.R. and Parent, R.E., 1988. The behavioral test-bed: Obtaining complex behavior from simple rules. *The Visual Computer*, 4(6), pp.332-347.
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8. Provot, X., 1995, May. Deformation constraints in a mass-spring model to describe rigid cloth behaviour. In *Graphics interface* (pp. 147-147). Canadian Information Processing Society.
9. Tamstorf, R., Jones, T. and McCormick, S., 2015. Smoothed aggregation multigrid for cloth simulation. *ACM Transactions on Graphics*, 34 (6), 1-13.
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Smoothed Aggregation Multigrid for Cloth Simulation [9]

This paper explains current challenges associated with cloth simulation, one of which being handling constraints and collisions. Simulating a large number of collisions is particularly computationally expensive, therefore researchers introduced smoothed aggregation method. They further explain how they used prefiltered preconditioned conjugate gradient method to efficiently calculate mesh constraints. Finally, they conclude that using their prefiltering method they managed to achieve 6-8x speedups. What I have taken from this paper are different cloth models (i.e. elasticity model, spring damper model).

Physically Based Deformable Models in Computer Graphics [7]

The article describes the most important contributions of the past decade in the area of computer graphics. It touches upon many different aspects of computer simulations including finite element analysis, mass-spring systems and coupled particle systems. The researchers also discuss how those tools are applied for elastoplastic deformations, fracture and cloth simulations. What has been the most useful for me in this journal is the significance of Bullet engine in computer simulations.

Interactive Simulation of Rigid Body Dynamics in Computer Graphics [2]

Presented journal talks about improvements gained in real time rigid body simulations. It explains how they differ from an offline simulations for VFX but also points out similarities. The article also describes in great detail simulation loop of any rigid body simulation and talks extensively about collision detection. The article touches on different types of constraints (i.e glue constraint) and maths behind it. What I found particularly useful in this article are the explanations on how the physics is calculated when I press "simulate" button. It also explains brilliantly how constraints work and how polygon normals are used to calculate it.