This thesis presents an implementation of the Loosely Connected Particles (LCP) method of hair animation proposed by Bando et al. We updated the method with several modern approaches. Firstly, we implemented two variations of parallel processing for the simulation which differ in work distribution among threads. The results indicate that work is distributed evenly, and thus dynamic distribution is not needed. Secondly, we applied the Deep Opacity Maps method of hair shadowing on the LCP and introduced alpha thresholding to eliminate artifacts. We supply a clean user interface for parameter tweaking with instant response and an easy-to-use interface for cutting hair using mouse controls. We discuss the suitability of using C# with .NET for developing a performance-heavy application.