Model of social force

In this project, you will implement and optimize a simulation of pedestrians' dynamics and interactions. More precisely, you will optimize the Social Force Model for Pedestrian Dynamics, as described in the paper by Dirk Helbing and Peter Molnar [1]. The model uses a series of forces (e.g., destination, other pedestrians' location, distance to obstacles, repulsive and attractive forces) to predict the motion of individuals in a crowd.

[1] https://arxiv.org/pdf/cond-mat/9805244.pdf