

Subject3

The aim of this internship is to study and produce effective simulations of a model of urban growth that was proposed by physicists in the 90's. This model is based on correlated gradient percolation and turned out to give realistic results for the case of the growth of Berlin city. The candidate will implement the model with possible modifications in order to produce effective simulations.

References :

Makse, Andrade, Batty, Havlin, Stanley : Modeling urban growth patterns with correlated percolation, arXiv :cond-mat/9809431v1