MDS Research Project – Agent Based Model

Zehao Qian

March 19, 2024

1 Topics

1. An agent-based model with social interactions for scalable probabilistic prediction of performance of a new product

2. Advances in the agent-based modeling of economic and social behavior

2 Useful Materials

- Agent Based Model on Science Direct It contains a lot of useful information about agent based model and academic thesis.

- Stochastic and Deterministic Modeling of Cell Migration – Handbook of Statistics

3 AMB library for Python

ABM GitHub Topic

3.1 Mesa

GitHub link: https://github.com/projectmesa/mesa

Documentation: https://mesa.readthedocs.io/en/stable/

3.2 AgentPy – Old

GitHub link: https://github.com/jofmi/agentpy

Documentation: https://agentpy.readthedocs.io/en/latest/

3.3 PyABM – Too old

3.4 AgentMaps – JavaScript

This library is not based on Python, but if I choose to do research on GIS, this library will be useful.