



UMR 6228 – I.D.E.E.S.

Identités et Différentiations de l'Environnement des Espaces et des Sociétés

Laboratoire MTG

Contacts :

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Research engineer in computer science

Job description:

Modelling and simulation of complex geographical systems open new perspectives both in fundamental research and in public or private land use planning. The use of computer science methods linked to complex system study such as cellular automata and multiagent systems, requires high computing skills, which slows down their diffusion among the geography community and therefore among land use planners. Simulation platform MAGEo aims at facilitating the diffusion of these methods. MAGEo is a modelling and simulation environment to develop spatial models through the connection of Geographical Information Systems, cellular automata and multiagent systems, without need for programming skills.

You will participate to the further design and programming of this platform, following the existing work of the MTG team.

Location: Mont-Saint-Aignan, France (76130).

Duration: one year, renewable (ANR funding), starting march 2009.

Skills:

Computer science:

Modelling, Simulation, Graph theory, Computational geometry, Cellular automata, multiagent systems.

Development :

OOP, UML, XML, Pascal/Delphi

Other:

French fluency.

Qualifications:

Master or equivalent, or PhD in computer science

Contract type:

Postdoctoral position or renewable one year contract or Master internship

About us:

MTG is a French research team in geography that specializes in modeling and in spatial analysis. This scientific orientation led us to use innovating methodologies, quantitative geographical information processing, and formal approaches, mathematical or computational. Our main fields of endeavor are currently distributed intelligence techniques of simulation (cellular automata, multiagent systems) and the measure of complex spatial organizations (self-organization, emergence, urban discontinuities, diffusion, variography etc.). These angles are applied to social sciences, politics and culture.

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