Postdoctoral fellowship

Development and enhancement of the GAMA platform

Context

GAMA (http://sourceforge.net/GAMA-Project) is a generic platform for developing agent-oriented simulation. It is based on the RePast toolkit and offers a modelling language of its own, a seamless integration with GIS data, and a reusable generic meta-model for developing agent-based models. This platform is used in most of the simulation projects conducted in the MSI Laboratory ("Modélisation et Simulation Informatique"). After having been developed by the researchers themselves, GAMA needs to be reshaped and adapted to (1) the needs of the end-users, modelers and computer scientists; (2) the new application domains in which it is intended to be used (management of renewable resources, ecosystems, etc.); (3) the evolution of the underlying technology (RePast).

Expected work
- To take the lead of the development team (4 people);
- To identify the needs and priorities by discussing with experts, modellers and developers.
- To improve the robustness of the platform and add new functionalities to it;
- To design a kernel adapted to the current evolution of RePast.

The candidate will work with a development team already in place at MSI, composed of two PhD students and two full-time researchers of the IRD.

Qualification
- Experience in development with Java and Eclipse;
- Experience on agent-based simulation platforms (Repast, NetLogo, MASON, etc.);
- A Ph.D. degree in computer science or related domains
- Knowledge of French (conversation, writing) would be appreciated (in case of equivalent qualifications, the preference will be given to a French-speaking candidate).

Practical Information
- Duration: 12 months as soon as possible
- Place: MSI Laboratory, IFI (Francophonie Institute for Computer Science). Associated to the research unit GEODES of the IRD (French Institute of Research for overseas Development) Ha Noi, Viet Nam
- Researchers: Alexis Drogoul (IRD), Ho Tuong Vinh (IFI)
- Compensation: To be negotiated

Contact

Send your CV and Motivation letter to:
HO Tuong Vinh
Email: ho.tuong.vinh@auf.org
Web site: http://www.ifi.auf.org/