

## George Ferguson Bio Sketch

George Ferguson is a Research Scientist in the Computer Science Department at the University of Rochester. His background is in knowledge representation and reasoning, in particular the application of temporal logic to reasoning about agents and activities, and the role of assumption-based reasoning in practical reasoning. He has extensive experience with both the theory and the implementation of reasoning systems, ontologies, planning and scheduling systems, and other decision support tools. He was the PI of an effort under the DARPA DAML program that investigated the role of temporal ontologies in the semantic web and a co-PI on several other projects.

Dr. Ferguson is the principal architect of the TRIPS family of systems. TRIPS, originally "The Rochester Interactive Planning System," is a long-term effort to design, implement, evaluate, and deploy intelligent assistants that collaborate with people using conversational natural language. The goal is to have systems that help people solve problems by understanding what the people are doing and figuring out how they can help. The systems would interact naturally, like people, requiring no training to use. The systems would adapt to their users and be able to learn new ways of solving problems by observation and instruction. Dr. Ferguson has been principally responsible for the system architecture and infrastructure of the TRIPS systems, as well as for the specification and development of a variety of reasoning components in several different domains ranging from specialized logistics planning, to general tasks in an office environment, to helping people self-manage their health care in their homes.

In addition to his work on the TRIPS systems, Dr. Ferguson is the leader of a team whose goal is to develop realistic AI testbeds using computer gaming technology. Unlike several similar projects, a major goal of the Quagents effort is to use these platforms to enhance how AI is taught by having students apply the theories from their textbooks to exciting, realistic problems involving agents in the simulated game world.

Dr. Ferguson is well known for his contributions to the AI community. He is a past program chair of the National Conference on Artificial Intelligence (AAAI-2004) and has served on numerous other program committees (including AAAI, ICAPS, PRICAI, KCAP, and W3 conferences) and review boards (including NASA and NSF). He is the founding chair of the AAAI Intelligent Systems Demonstrations program, whose goal was and is to get exciting AI projects out of the lab and into the spotlight.

<http://www.cs.rochester.edu/~ferguson>

<http://www.cs.rochester.edu/research/cisd/>

<http://www.cs.rochester.edu/research/quagents/>