



## TECHNOLOGY

# IMPACT Agent Development System

## OVERVIEW

An intelligent agent is a program that gathers information or performs other services without a user's immediate presence and on a regular schedule. Typically, an agent program, using pre-set parameters, searches and gathers information of interest on a network, and presents it to the user on a periodic basis. For example, agents have been developed that personalize information on a web site based on registration information and usage analysis. Or some agents can tell you when the site has been updated or look for other events. Analyst agents not only gather but also organize and interpret information for the user.

However, current commercial agent technologies do not provide explicit mechanisms that allow existing legacy code bases to play in an agent environment. In addition, they do not support cross-platform or cross-application agent interactions.

Professor V.S. Subrahmanian and his fellow researchers have designed IMPACT (Interactive Maryland Platform for Agents Collaborating Together), an agent development system that overcomes the deficiencies stated above. IMPACT provides a set of servers (yellow pages, thesaurus, registration, type and independent manner). It also provides an Agent Development Environment for creating, testing, and deploying agents for specific applications.

IMPACT is capable of (1) building agents on top of existing legacy code, (2) interacting with other agent platforms such as IBM Aglets and Lockheed security agents, (3) supporting agent-to-server and agent-to-agent communications, and (4) collaborating with one another to make intelligent decisions based on objectives set forth by the user.

Applications of IMPACT include alert services (e.g. fraud alert in banking and insurance sectors), supply chain management and inventory management in retail and manufacturing sectors, personalization services where online services may vary from one user to another, etc.

For further information, please contact the Office of Technology Commercialization, (301) 405-3947, E-mail: [otc@umd.edu](mailto:otc@umd.edu).

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## Additional Information

## INSTITUTION

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## **CATEGORIES**

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- Software + Algorithm

## **EXTERNAL RESOURCES**

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