

# Agent Systems and their Applications – a Biased Perspective

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Since 1994 we are supposed to believe that software agents will become the next revolutionary information technology that is going to solve, among others, the problem of information overload [4]. This change will not only impact human-computer interaction [2, 4] but also change the way in which we construct software – especially in the case of large complex systems [3]. However, as it is easy to see, the agent-revolution does not seem to materialize. Even though, software agents are very popular subject of academic research, it is difficult to point to a successful real-world implementation of a large scale agent system.

The aim of our presentation is two-fold. First, a few basic observations about software agents and agent systems will be presented. Second, it will be shown that it is possible use modern agent platforms (e.g. JADE) to implement large scale agent systems [1]. Finally, two applications of software agents will be briefly discussed: (1) model agent-based e-commerce system, (2) agents as resource brokers in the grid [5].

## References

- [1] K. Chmiel, M. Gawinecki, P. Kaczmarek, M. Szymczak, M. Paprzycki (2005) Efficiency of JADE Agent Platform. In: *Scientific Programming*, 13(2), 2005, 159-172
- [2] J. Hendler (1999) Is There an Intelligent Agent in Your Future?, *Nature*, 11 March, 1999
- [3] Jennings N. R. (2001) [An agent-based approach for building complex software systems](#), *CACM*, 44 (4), 35-41
- [4] Maes P. (1994) [Agents that Reduce Work and Information Overload](#), *CACM*, 37(7), 31-40
- [5] Papers completed by our team can be found at: <http://agentlab.swps.edu.pl>