

Position statement for FOSE-MAS session

TOWARDS (on the need of) AN AGENT-ORIENTED PARADIGM

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A FACT

- No agents and MAS in mainstream literature in computer programming and software engineering
 - from journals to academic textbooks

ACM Transaction on Software Engineering (TOSEM)

- "agent-oriented" 1 / 290
- "multi-agent systems" 1 / 290
- "object-oriented" 125 / 290

Developing multiagent systems: The Gaia methodology
F. Zambonelli, N. R. Jennings, M. Wooldridge

"agent" - 27 / 290

but **all** not related to AAMAS literature
(mobile agents, concurrency)

ACM Transaction on Programming Languages, Application, Systems (TOPLAS)

- "agent-oriented" 0 / 1009
- "multi-agent systems" 0 / 1009
- "object-oriented" 216 / 1009

A PROBLEM

- “No agent-oriented paradigm yet”
 - “paradigm” here like in “object-oriented paradigm”
 - focus on computer programming and software development
- A proof
 - see previous slide

A DIRECTION

- Working to create an agent-oriented paradigm
 - improve the interaction with mainstream computer programming and SE community and related literature
 - and industry, of course
 - more relevance to the **theory** and **practice** of agent-based software development
 - putting SE / Programming (issues, literature, ...) at the center