

# MultiAgent Systems (MAS)

(PósAutomação)

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<https://jomifred.github.io/mas/>

## 1 Objectives

- Learn the main core concepts of MultiAgent Systems
- Experiment and develop practical systems with MAS
- Be familiar with MAS literature

## 2 Content

Introduction to MAS. Foundations of MAS. MAS dimensions: agents, interaction, environment and organisation. Coordination. Cooperation. Negotiation. Agent Architectures. MAS development tools and languages. JaCaMo Platform.

## 3 Assignment

- Practical Experiments (25%)
- Project (50%)
- Seminars (25%)

## 4 Bibliography

- M Wooldridge. *An Introduction to Multiagent Systems*. 2nd Ed. John Wiley, 2009.
- G Weiss, editor. *Multiagent Systems: a modern approach*. 2nd Ed. The MIT Press, 2013.
- Jacques Ferber. *Multi-Agent Systems: An Introduction to Distributed Artificial Intelligence*. Addison-Wesley, 1999.
- Y. Shoham and K. Leyton-Brown. *Multiagent Systems: Algorithmic, Game-theoretic, and Logical Foundations*. Cambridge University Press, 2009.
- Rafael Bordini et al. *Multi-Agent Programming: Languages, Platforms, and Applications*. Springer, 2005.