

## **Agent-Oriented Software Engineering, full development lifecycle**

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### **Abstract**

**This research traces, after conducting a wide literature survey, the areas not covered by prominent agent oriented software engineering (AOSE) methodologies. Each methodology has its strength and weakness and focuses on some stages of software development lifecycle but not all stages. This paper presents an addition to a well established AOSE methodology (MaSE). MaSE is considered one of the strongest in the field, it does not, however, support handling early requirements. This work integrates MaSE with another methodology known for its strength in early requirement representation. The integration implied the development of a wide set of translation rules between two different environments of notations and graphical representations. A software tool was developed to automate the translation and a case study is used to demonstrate the work.**

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**Keywords: Agents, Intelligent Agents, Software Engineering (SE), UML, AUML, and Design Patterns.**

For the paper in Arabic see pages (87-98)

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