MoK

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Molecules of Knowledge

Molecules of Knowledge (MoK for short) is a model for knowledge self-organisation, exploiting the biochemical metaphor for its basic abstractions, and biochemical coordination as its coordination model.

As far as the basic MoK abstractions are concerned, in MoK knowledge atoms are generated by knowledge sources in shared spaces — compartments —, self-aggregate to shape knowledge molecules, and autonomously move toward knowledge consumers, whose actions (either epistemic or not) are represented as enzymes.

As far as the MoK computational model is concerned, MoK features biochemical tuple spaces for the creation, aggregation, diffusion and consumption of knowledge atoms and molecules.

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Technology

Current MoK implementations are based on the TuCSoN coordination technology. Since they are used for tests and experiments, they are not publicly available, yet.

Main URLs

- MoK on APICe <<tt>http://mok.apice.unibo.it</tt>
- MoK on Facebook <<tt>http://www.facebook.com/MoleculesOfKnowledge</tt>
- MoK on Google+ <<tt>http://plus.google.com/112442088826421613805</tt>

About MoK

Books

- Stefano Mariani, Coordination of Complex Sociotechnical Systems: Self-organisation of Knowledge in MoK.

Papers
Foundations


Social action


Expressiveness


- Stefano Mariani. *Parameter Engineering vs. Parameter Tuning: the Case of Biochemical Coordination in MoK*. From Objects to Agents, CEUR Workshop Proceedings 1099, 2-3 December 2013

MoK-News


Theses

- Molecules of knowledge: a new approach to knowledge production, management and consumption
- Molecules of Knowledge: architettura, implementazione ed esempi

Student Projects

- RSS-based sources of knowledge in MoK-News