COMPUTER SCIENCE COLLOQUIUM

Design Patterns for Description Logic Programs

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Abstract:

Originally proposed in the mid-90s, design patterns for software development played a key role in object-oriented programming not only in increasing software quality, but also by giving a better understanding of the power and limitations of this paradigm. Since then, several authors have endorsed a similar task for other programming paradigms, in the hope of achieving similar benefits. In this talk I present a set of design patterns for Mdl-programs, a hybrid formalism combining several description logic knowledge bases via a logic program. These patterns are extensively applied in a natural way in a large-scale example that illustrates how their usage greatly simplifies some programming tasks, at the level of both development and extension. Some limitations of this formalism are also discussed, by examining some usual patterns in other programming paradigms that have no parallel in Mdl-programs.

Host: Lus Cruz-Filipe