

Previous Work Relating to CAMPaM Themes

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1 Interests

The following describes a certain subset of my research interests only. I have left out anything that has not immediate connection to the central CAMPaM themes.

In general, I'm interested in looking at the fundamentals of approaches that have a practical application. For instance, I do think the main thrust of the model-driven development idea is heading in the right direction, but here and there a few basics should be sorted out before the whole thing may fly.

Here are the areas related to CAMPaM themes in which I have been making contributions.

1.1 Metamodeling Fundamentals

Together with Colin Atkinson I have tried to clarify when and when not to use metamodeling [8], figured out how parallel descriptions hierarchies may be aligned [2], and distinguished two important dimensions of metamodeling (linguistic vs ontological) [6,5].

In work yet to be published I have distinguished between two kinds of model roles (token vs type models) and formalized what "metamodeling" could mean, including a clarification whether or not it is reasonable to refer to abstract syntax definitions (such as the UML superstructure) as metamodels [10].

1.2 Metamodeling Architectures

Together with Colin Atkinson I thought about ways to make the UML infrastructure smaller and simpler [1], tried to provide a definition for the term "platform" [7], and provided a conceptual framework to understand and evaluate tool infrastructures [7].

1.3 Domain Metamodeling

Based on earlier ideas [1], in joint work with Friedrich Steimann, I have elaborated on applications for "deep characteri-

zation" and how deep instantiation provides a nice solution, in particular in comparison to powertypes [12].

1.4 Stereotypes

In joint work with Colin Atkinson and Brian Henderson-Sellers I have criticized a common unofficial use of stereotypes and argued for the need to better support modelers in specifying properties for classes, objects, and a combination of the two [9].

1.5 Profiles

Colin Atkinson and I have suggested a more comprehensive interpretation of profiles [3].

1.6 Architecture Stratification

Relating to the "multi abstractions" CAMPaM theme, I have recently developed a prototype for handling multiple descriptions of the same system at different abstraction levels [11]. It is based on the concept of "architecture stratification" developed jointly with Colin Atkinson [4].

References

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