

Moving Architectural Description from Under the Technology Lamppost

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Abstract

Software architecture description languages (ADLs) were a particularly active research area in the 1990s. In 2000, I co-authored an extensive study of existing ADLs, which has served as a useful reference to software architecture researchers and practitioners. However, the field of software architecture and our understanding of it have undergone a number of changes in the past several years. In particular, the Unified Modeling Language (UML) has gained a lot of popularity and wide adoption, and as a result many of the ADLs I had studied have been pushed into obscurity. In this talk, I will argue that the main reason behind this is that the early ADLs focused almost exclusively on the technological aspects of architecture, and mostly ignored the application domain and business contexts within which software systems, and development organizations, exist. Together, these three concerns - technology, domain, and business - constitute the three lampposts needed to appropriately illuminate software architecture and architectural description. I will use this new framework to evaluate both the languages from my original study, as well as several more recent ADLs (including UML 2.0).