Abstract

Organizations often need to choose Software Architecture for future development from several competing candidate architectures. The various stakeholders’ quality requirements need to be
considered collectively to describe the quality requirements of the envisioned system and therefore build the basis for the comparison and selection criteria. The involvement of many stakeholders with different preferences of quality requirements poses a challenge for evaluation. In this paper, Multivariate Statistical Analysis approach has been employed to model the differences in preferences of the quality requirements of the stakeholders. Based on this model the different candidate architectures are evaluated for the conformance to the stakeholders’ quality requirements.

References

Software Architecture Evaluation using Multivariate Statistical Analysis

Index Terms

Computer Science
Software Engineering

Keywords

Software Architecture
Quality Requirements
Multivariate Statistical Analysis