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Keynote Address

Emerging Topics in Software Engineering

Dr. Rajib Mall

*Department of Computer Science and Engineering
Indian Institute of Technology, Kharagpur
rajib@cse.iitkgp.ernet.in*

Abstract

Some of the basic assumptions of software development and maintenance paradigms are changing drastically. For example, software is no more being developed as a product, but has become a service. This basic paradigm shift is already affecting software developers as well as the users of software. We first discuss the paradigm shift and the reasons behind this shift. Subsequently, we examine the component-based approach to develop software. Subsequently, we discuss the emergence of the Cloud computing as a game changer that is serving as an enabler of the Service-Oriented Architecture (SOA) and Software as a Service (SAAS). In the SOA paradigm, an application is built by orchestrating existing services, and writing only the “missing” ones. SaaS is changing software as a product to be purchased and owned to a service to be availed of and paid for the extent of use. We discuss the nitty gritty of SOA and SAAS with particular reference to the Cloud environment. Finally, we discuss the emerging trends.