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Keynote Talk

Seven Essentials of Software Process

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Abstract

A hybrid view of software development has risen from the collision and convergence of grassroots and craft-based process trends with research and engineering-based ones. In this talk, I will first explain the seven essential characteristics of this contemporary view: human-centricity, pragmatism, discipline, technical orientation, empiricism, experimentation, and value orientation. These characteristics are not simply complementary: they are mutually reinforcing and mutually balancing. I will then focus on the seventh characteristic, value orientation, in terms of how it interacts with the remaining characteristics. The resulting thinking sheds light to weaknesses and strengths of current packaged approaches, and how successful software development is expected to unfold and effective strategies will be uncovered in the era to come.

Categories & Subject Descriptors: K.6.3 Software Management--Software Process; D.2.9 Software Engineering--Management

General Terms: Management, Measurement, Economics, Human Factors

Biography

Hakan Erdogmus is a Senior Research Officer at the NRC Institute for Information Technology in Ottawa, Canada and Editor in Chief of IEEE Software. He has presented and published extensively on software engineering economics and cost-benefit evaluation of development practices. Hakan teaches graduate courses on software engineering economics at University of Calgary, where he is an adjunct professor in the Computer Science Department. In 2003, The American Society for Engineering Education has recognized his contribution by the Eugene L. Grant Award for best paper in Engineering Economy. Hakan holds an MSc in Computer Science from McGill University (1989) and a PhD in Telecommunications from Université du Québec (1994).