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Sommario/riassunto

Software Engineering is a multifaceted and expanding topic. It aims to provide theories, methods and tools to tackle the complexity of software systems, from development to maintenance. Its complexity is made even more severe today by rapid advances in technology, the pervasiveness of software in all areas of society, and the globalization of software development. The continuous expansion of the field presents the problem of how to keep up for practitioners. For educators, the key questions are how should software engineers be educated and what are the core topics and key technologies? Even looking only at the last decade, the tremendous changes that have taken place in the software engineering industry, and in the industrial world in general, raise many questions. What are the effects of: Outsourcing? Distributed software development? Open source? Standardization? Software patents? Model-driven development? How should these developments change the way we teach software engineering? Should textbooks be updated? Should software engineering play a different role in the computer science curriculum, for example, be more pervasive? How are instructors in universities handling these issues? All these issues were discussed at the Software Education and Training sessions at the International Conference on Software Engineering (ICSE 2005) by leading researchers, educators, and practitioners in software engineering, who presented their—sometimes controversial—views and insights on software engineering education in the new millennium. In this volume we have collected some of the most representative and innovative approaches that were presented at the workshop. The authors revised their papers based on discussions at the conference and the comments they received from the reviews.