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Testing Aspects -- Enhanced Features of SLOs: Focus on Specialization -- Context-Aware Adaptation of Smart Los -- Part Two: Fundamentals of Authoring Tools to Design SLOs, Environments and Smart Education Case Study -- Background to Design Smart LOs and Supporting Tools -- Authoring Tools To Design Smart Los -- Authoring Tools To Specialize and Adapt Smart Los -- Robot-Based Smart Educational Environments to Teach CS: A Case Study -- Smart Education in CS: A Case Study -- What is on the Horizon? -- Glossary -- Index.

Sommario/riassunto	This monograph presents the challenges, vision and context to design smart learning objects (SLOs) through Computer Science (CS) education modelling and feature model transformations. It presents the latest research on the meta-programming-based generative learning objects (the latter with advanced features are treated as SLOs) and the use of educational robots in teaching CS topics. The introduced methodology includes the overall processes to develop SLO and smart educational environment (SEE) and integrates both into the real education setting to provide teaching in CS using constructivist and project-based approaches along with evaluation of pedagogic outcomes. Smart Learning Objects for Smart Education in Computer Science will appeal to researchers in CS education particularly those interested in using robots in teaching, course designers and educational software and tools developers. With research and exercise questions at the end of each chapter students studying CS related courses will find this work informative and valuable too.