1. Record Nr. UNISA996418293103316 Frontiers in Software Engineering Education [[electronic resource]]: **Titolo** First International Workshop, FISEE 2019, Villebrumier, France, November 11–13, 2019, Invited Papers // edited by Jean-Michel Bruel, Alfredo Capozucca, Manuel Mazzara, Bertrand Meyer, Alexandr Naumchev, Andrey Sadovykh Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2020 3-030-57663-9 **ISBN** Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (XI, 401 p. 96 illus., 65 illus. in color.) Programming and Software Engineering; ; 12271 Collana Disciplina 005.1071 Soggetti Software engineering Computer programming Education—Data processing Computer logic Database management Software Engineering/Programming and Operating Systems **Programming Techniques** Computers and Education Logics and Meanings of Programs **Database Management** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto COURSE EXPERIENCE -- Teaching Formal Methods: An Experience Report -- A review of the structure of a course on Advanced Statistics for Data Scientists -- Reflection on Teaching Formal Approaches for Software Development in Higher Education -- Experience of mixed learning strategies in teaching Lean Software Development to third year undergraduate students -- Teaching Theoretical Computer Science at Innopolis University -- LESSONS LEARNT -- Teaching Software Testing

> to Industrial Practitioners using Distance and Web-Based Learning --Towards code review guideline in a Classroom -- IT education in St. Petersburg State University -- Ten Unsafe Assumptions When Teaching

Topics in Software Engineering -- CURRICULUM AND COURSE DESIGN.-Analysing the SWECOM standard for designing a DevOps education programme -- Teaching Logic, from a Conceptual Viewpoint -- On the Design of a New Software Engineering Curriculum in Computer Engineering -- Collaborative Modelling and Co-simulation in Engineering and Computing Curricula -- COMPETITIONS AND WORKSHOPS -- Designing Interactive Workshops for Software Engineering Educators -- Hackathons as a Part of Software Engineering Education: CASE in Tools Example -- Teaching E cient Recursive Programming and Recursion Elimination using Olympiads and Contests Problems -- EMPIRICAL STUDIES -- Experience in monitoring EEG signals during summer student internships -- A Study of Cooperative Thinking -- TOOLS AND AUTOMATION -- Analysis of Development Tool Usage in Software Engineering Classes -- Applying test-driven development for improved feedback and automation of grading in academic courses on software development -- GLOBALIZATION OF EDUCATION -- Internationalization Strategy of Innopolis University --Finding the Right Understanding: Twenty-First Century University, Globalization and Internationalization -- TOOLS Workshop: ARTIFICIAL AND NATURAL TOOLS (ANT) -- Automated Cross-Language Integration Based on Formal Model of Components -- Scalable Thread-Modular Approach for Data Race Detection -- On the development of the compiler from C to the processor with FPGA accelerator.

## Sommario/riassunto

This book constitutes invited papers from the First International Workshop on Frontiers in Software Engineering Education, FISEE 2019. which took place during November 11-13, 2019, at the Château de Villebrumier, France. The 25 papers included in this volume were considerably enhanced after the conference and during two different peer-review phases. The contributions cover a wide range of problems in teaching software engineering and are organized in the following sections: Course experience; lessons learnt; curriculum and course design; competitions and workshops; empirical studies, tools and automation; globalization of education; and learning by doing. The final part "TOOLS Workshop: Artificial and Natural Tools (ANT)" contains submissions presented at a different, but related, workshop run at Innopolis University (Russia) in the context of the TOOLS 2019 conference. FISEE 2019 is part of a series of scientific events held at the new LASER center in Villebrumier near Montauban and Toulouse. France.