Record Nr. UNINA9910427735603321 Autore Felderer Michael Titolo Ernst Denert Award for Software Engineering 2019 : Practice Meets Foundations / / edited by Michael Felderer, Wilhelm Hasselbring, Heiko Koziolek, Florian Matthes, Lutz Prechelt, Ralf Reussner, Bernhard Rumpe, Ina Schaefer Cham: .: Springer International Publishing: .: Imprint: Springer. . Pubbl/distr/stampa 2020 **ISBN** 3-030-58617-0 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (V, 140 p. 58 illus., 6 illus. in color.) Disciplina 005.1 Soggetti Software engineering Software engineering - Management Electronic data processing - Management Software Engineering Software Management **IT Operations** Lingua di pubblicazione Inglese Materiale a stampa **Formato** Livello bibliografico Monografia Nota di contenuto Ernst Denert Software Engineering Awards 2019 -- Software Engineering -- Applications of Synchronized Pushdown Systems --Software Developers' Work Habits and Expertise: Empirical Studies on Sketching, Code Plagiarism, and Expertise Development -- Applied Artifact-Based Analysis for Architecture Consistency Checking -- Same but Different: Consistently Developing and Evolving Software Architecture Models and Their Implementation -- Actionable Program Analyses for Improving Software Performance. Sommario/riassunto This open access book provides an overview of the dissertations of the five nominees for the Ernst Denert Award for Software Engineering in 2019. The prize, kindly sponsored by the Gerlind & Ernst Denert Stiftung, is awarded for excellent work within the discipline of Software Engineering, which includes methods, tools and procedures for better and efficient development of high quality software. An essential

requirement for the nominated work is its applicability and usability in

industrial practice. The book contains five papers describing the works by Sebastian Baltes (U Trier) on Software Developers'Work Habits and Expertise, Timo Greifenberg's thesis on Artefaktbasierte Analyse modellgetriebener Softwareentwicklungsprojekte, Marco Konersmann's (U Duisburg-Essen) work on Explicitly Integrated Architecture, Marija Selakovic's (TU Darmstadt) research about Actionable Program Analyses for Improving Software Performance, and Johannes Späth's (Paderborn U) thesis on Synchronized Pushdown Systems for Pointer and Data-Flow Analysis – which actually won the award. The chapters describe key findings of the respective works, show their relevance and applicability to practice and industrial software engineering projects, and provide additional information and findings that have only been discovered afterwards, e.g. when applying the results in industry. This way, the book is not only interesting to other researchers, but also to industrial software professionals who would like to learn about the application of state-of-the-art methods in their daily work.