1. Record Nr. UNISA996418299603316 Static analysis: 27th International Symposium, SAS 2020, virtual event, Titolo November 18-20, 2020, proceedings / / David Pichardie, Mihaela Sighireanu (editors) Cham, Switzerland: ,: Springer, , [2020] Pubbl/distr/stampa ©2020 **ISBN** 3-030-65474-5 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (XIV, 381 p. 98 illus., 46 illus. in color.) Collana Lecture notes in computer science;; 12389 Disciplina 005.1 Soggetti Computer programming Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di contenuto Polynomial Invariants for Affine Programs -- Cost Analysis of Smart Contracts via Parametric Resource Analysis -- Memory-Efficient Fixpoint Computation -- Abstract Neural Networks -- Termination of Polynomial Loops -- Stratified Guarded First-order Transition Systems -- Predicate Abstraction and CEGAR for nuHFL(Z) Validity Checking --Counterexample- and Simulation-Guided Floating-Point Loop Invariant Synthesis -- Harming Dynamic Analysis -- Simple and Efficient Computation of Minimal Weak Control Closure -- A Library Modeling Language for the Static Analysis of C Programs -- Interprocedural Shape Analysis Using Separation Logic-Based Transformer Summaries -- Probabilistic Lipschitz Analysis of Neural Networks -- On Multi-Language Abstraction: Towards a Static Analysis of Multi-Language Programs -- Exact and Linear-Time Gas-Cost Analysis -- Farkas-Based Tree Interpolation. Sommario/riassunto This book constitutes the refereed proceedings of the 27th International Symposium on Static Analysis, SAS 2020, held in Chicago. IL, USA, in November 2020. The 14 regular papers presented in this book together with 2 invited talks and 1 extended abstract, were carefully reviewed and selected from 34 submissions. The papers cover topics such as abstract domains; abstract interpretation; automated deduction; data flow analysis; debugging; deductive methods; emerging applications; model-checking; program transformations;

predicate abstraction; security analysis; tool environments and architectures; and type checking. Due to the Corona pandemic this event was held virtually.