Record Nr. UNINA9910799215703321 Tools and Methods of Program Analysis: 6th International Conference, **Titolo** TMPA 2021, Tomsk, Russia, November 25–27, 2021, Revised Selected Papers / / edited by Rostislav Yavorskiy, Ana Rosa Cavalli, Anna Kalenkova Pubbl/distr/stampa Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2024 **ISBN** 3-031-50423-2 Edizione [1st ed. 2024.] 1 online resource (X, 198 p. 68 illus., 48 illus. in color.) Descrizione fisica Communications in Computer and Information Science., 1865-0937 :: Collana 1559 Disciplina 005.14 Soggetti Software engineering Artificial intelligence Application software Computer networks Computer science Programming languages (Electronic computers) Software Engineering Artificial Intelligence Computer and Information Systems Applications Computer Communication Networks Theory of Computation Programming Language Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Contributed Papers -- Algorithm for Mapping Layout Grids in User Interfaces: Automating the "Squint Test" -- Process Mining Algorithm for Online Intrusion Detection System -- Bayesian Optimization with Time-Decaying Jitter for Hyperparameter Tuning of Neural Networks --Investigation of the capabilities of artificial neural networks in the problem of classifying objects with dynamic features -- Analysis of Hardware-Implemented U-Net-like Convolutional Neural Networks --

Early Detection of Tasks With Uncommonly Long Run Duration in Post-

Trade Systems -- Unpaired Image-to-Image Translation using Transformer-based CycleGAN -- Model-based Testing Approach for Financial Technology Platforms: An Industrial Implementation -- Searching for Deviations in Trading Systems: Combining Control-Flow and Data Perspectives -- SPIDER: Specification-based Integration Defect Revealer -- Link graph and data-driven graphs as complex networks: comparative study -- An approach to create a synthetic financial transactions dataset based on NDA-protected dataset -- Optic Flow approximated by a homogeneous, three- dimensional Point Renewal Process -- Fair Mutual Exclusion for N Processes -- Data Stream Processing in Reconciliation Testing: Industrial Experience -- Short Papers -- Detection of Flying Objects Using the YOLOv4 Convolutional Neural Network -- Modern Experiment Management Systems Architecture for Scientific Big Data -- An Approach to Modules Similarity Definition Based on the System Log Analysis.

## Sommario/riassunto

This book constitutes the refereed proceedings of the 6th International Conference on Tools and Methods of Program Analysis, TMPA 2021, held in Tomsk, Russia, during November 25–27, 2021. The 15 full papers and 3 short papers included in this book were carefully reviewed and selected from 45 submissions. They focus on various aspects of application of modern methods of data science to the analysis of software quality.