

## 1. On the Need of Understanding the Failures of Smart Contracts

Dabao Wang (1); Kui Liu (2); Li Li (1)

**Source:** *IEEE Software*, v 37, n 5, p 49-54, Sept.-Oct. 2020; **ISSN:** 0740-7459; **DOI:** 10.1109/MS.2020.3003921;

**Publisher:** IEEE Computer Society, USA

**Author affiliation:** (1) Monash University, Information Technology, Melbourne, VIC, Australia (2) Nanjing University of Aeronautics and Astronautics, Jiangsu, China

**Abstract:** When the execution of smart contracts fails, the transaction will not be recorded to provide hints for analysts to improve their automated analyzers. To mitigate this, we present ExecuWatch to watch the execution of smart contracts and report the execution details. (0 refs)

**Inspec controlled terms:** contracts - cryptocurrencies - distributed databases

**Uncontrolled terms:** ExecuWatch - execution details - smart contracts

**Classification Code:** C0230B Legal aspects of computing - C6130S Data security - C6160B Distributed databases - C7120 Financial computing

**IPC Code:** G06F9/44 - G06F21/00 - G06Q30/00 - G06Q40/00

**Treatment:** Practical (PRA)

**Database:** Inspec

**Data Provider:** Engineering Village

Copyright 2020, The Institution of Engineering and Technology