

Minesploit: Bitcoin White Hat Hacker Tool

A toolkit for pentesting bitcoin mining infrastructure

Meet the team



Johnny Santos

github.com/johnnyasantoss



Jayr Motta

github.com/jayrmotta



Lucas Balieiro

github.com/lucasbalieiro

The problem



- Bitcoin mining infrastructure has real security vulnerabilities
- No specialized framework exists for testing bitcoin mining systems
- Security researchers need accessible systems to test hypothesis

What is minesploit?



- Security research framework for testing Bitcoin mining software
- Composed of a Python library and an interactive shell
- Protocols: Stratum V1/V2, P2Pool implementations
- Utilities: CPU miner wrapper, networking, crypto helpers

Key Features



- 15+ implemented CVEs (Bitcoin Core, cgminer, Stratum) and even a zero day vulnerability
- Fluent, composable Python API
- Hypothesis-first design for rapid testing

Demo Time

Showing the framework

We found a new
vulnerability!

Impact



- Pool Accountability Destroyed - Miners can inflate their reported hashrate
- Financial Fraud - Get paid for work never done
- Silent Exploitation - No obvious signs of cheating

Responsible disclosure



We contacted the Stratum V2 maintainers and reported this vulnerability.

They acknowledged it and we're authorized to demonstrate it here today.

Thank you

