MIHAI-GEORGE LICU

📞 +40729572719 | ✉ mihai.licu@protonmail.com | 🌐 licu.dev | 💼 licu-mihai | 🐙 lmihaig

EDUCATION

University of Bucharest   Bucharest, Romania
Bachelor of Computer Science and Engineering   Sep 2020 – Jul 2024

WORK EXPERIENCE

CERN | Openlab Summer Intern   Geneva, Switzerland
European Organization for Nuclear Research   Jun 2023 – Sep 2023
- Orchestrated incident response initiatives for a significant hacking incident, leveraging OSINT methods and reverse engineering to dissect attack strategies and gauge breach magnitude.
- Engineered a Python tool for extensive CERN site scans, integrating SSO via Kerberos authentication. Systematically inventoried web technologies, pinpointed vulnerabilities, and initiated security enhancements.

ETH Zurich | Summer Research Fellow   Zurich, Switzerland
Swiss Federal Institute of Technology   Jul 2022 – Aug 2022
- Crafted exercises, infrastructure, and solutions for a Systems Security curriculum, familiarizing Master's candidates with advanced security methods like sandboxing and fuzzing.
- Conducted comprehensive validation and scalability tests for benchmarks, evaluating the performance and potential of a novel hardware-centric sandbox for WebAssembly utilizing Intel's memory protection keys technology at the kernel level.

PROJECTS

cryptorusticon | Rust
- Developed a Rust library for cryptography, utilizing the num crate for efficient mathematical operations.
- Implemented the Blum Blum Shub pseudorandom number generator and the Solitaire cipher from the Cryptonomicon novel and integrated with rigorous unit tests for reliability.

Yuri | Rust, Python
- Created a C2 framework that enables operators to establish and manage reliable communication channels with listening posts, facilitating effective command and control.
- Engineered a secure implant process for establishing reliable communication channels, ensuring optimized control over integrated systems.

HACKATHONS

DevHacks 2022 | 3rd Place
- On the basis of a climate change theme I developed a web app analyzing MEPs' voting records on climate change legislation utilizing machine learning.

Smarthack 2022 | Usability Prize
- Crafted a No Code web-scraping tool with a browser extension for data extraction, enabling users to automate data collection from websites to build personalized dashboards.

HackITall 2022 | 3rd Place
- Developed a tool for analyzing and predicting public companies' ESG scores based on their public reports and statements.

SKILLS

Programming Languages: Python, C, Rust, Go, C++

Developer Tools: Linux, Git, IDA Pro, Wireshark, Burp Suite