Timon Riechsteiner

Website

GitHub

in LinkedIn

△ *Mail*

Full-Stack Software Engineer with experience in:

- building blockchain arbitrage trading-bots
- **developing a blockchain fuzzer**, detecting more than 50 exploits with cumulative damage of over 2 million CHF
- setting up data pipelines and databases, with more than 50 billion datapoints
- **developing a blockchain trading-strategy-executor**, reducing costs by 90% compared to the previous implementation
- creating full-stack websites

Education

- BSc in Computer Science, 2024, 5.0 / 6.0, ETH Zürich
- **Bachelor Thesis**, "The Do-Anything Smart Contract" Blockchain Trading-Strategy-Executor reducing costs by 90%, 5.75 / 6.0, Supervised by Roger Wattenhofer and Arthur Gervais
- **Bilingual Swiss Matura (English / German)**, 2018, with an award for the best Matura Thesis, *KS Romanshorn*

Work Experience

Decentralized Intelligence AG (Website)

Zug, Switzerland

Blockchain Security Engineer, Full Time

September 2024 - August 2025

- The Company: provides blockchain security tools and consulting
- My Projects: developing a tool for detecting blockchain vulnerabilities and meeting its requirements for a 750k CHF innovation grant, working on other tooling, maintaining server infrastructure
- My Tasks: research and development of new features for the tool, developing a CI/CD pipeline, providing an API, meeting grant goals every month. Tasks for infrastructure: setup new machines, ensure continuous availability of machines
- Everyday Work: replicating and analyzing blockchain exploits, implementing and evaluating new features, deploy new versions to production. Infrastructure work: troubleshooting machine issues and replacing faulty parts, building new machines, adding them to the network
- **Results:** securing the final tranche of the grant, tool that detects 50 exploits which are responsible for damages of over 2 million CHF, analysis and replication of more than 250 past blockchain exploits, a database with over 250 billion ERC20 transfer and approval events, a 23k CHF PC build for AI workloads
- Tech Stack: Go, Python, Git, GitHub Actions, PostgreSQL, Solidity

IT-Service Desk, Psychiatric Services St. Gallen

Wil, Switzerland

Swiss Civilian Service (Zivildiensteinsatz), Full Time

August 2020 - November 2020

- The Company: Psychiatric Services St. Gallen with in-house IT-Support Desk
- My Project: Helping out in the IT-Support department
- My Tasks: setting up new machines and work stations, working on support tickets and troubleshooting issues with machines and devices
- Everyday work: responding to support tickets and calls, installing operating systems on new machines, adding them to the network, setting up new devices on site, and troubleshooting and fixing various issues with printers, computers, and other devices

Relevant Projects

CS Item Database & Browser (Website)

Full Stack Developer, Side Project

January 2025 - today

- The Project: maintaining an unofficial game item database, keeping it up-to-date and providing a website to browse it
- My Tasks: developing a data-pipeline to extract data continuously, developing and deploying the website
- Everyday Work: setting up and optimizing databases, developing and testing the data pipeline, developing and testing the front- and back-end
- **Results:** include a database 50 million price points, a bot that continuously keeps the database up-to-date, a full-stack website presenting the items
- Tech Stack: Python, PostgreSQL, Docker, Dagster, Git, React (JavaScript), HTML, R, RStudio

Crypto Trading-Bots

Full Stack Developer, Side Project

January 2022 - January 2024

- The Project: creating blockchain trading bots
- My Tasks: implementing bots that determine profitable strategies and execute them
- Everyday Work: deriving a formula to analytically maximize profit on arbitrage trades on Uniswap V2 like exchanges, developing a numerical solver to optimize trades on other exchanges, analyzing various financial blockchain projects for arbitrage opportunities, developing and testing tools that query the state of various blockchain projects and execute trades
- Tech Stack: Python, PostgreSQL, Solidity, Wolfram Mathematica, Matlab

Tech Skills

- Programming Languages:
 - Expert: Python, Go, Solidity, EVM Assembly, PostgreSQL
 - Proficient: Java, HTML/CSS, C++, LaTeX
- Databases & Data Science Tools:
 - Proficient: Dagster, Pandas, Scikit-Learn, TensorFlow, Matlab, R, RStudio
- Development-Tools:
 - Expert: Git, GitHub
 - Proficient: GitHub Actions, Docker
- OS: Linux, macOS, Windows

Languages & Nationality

- Swiss Citizenship
- German (Native Speaker)
- English (Business Fluent, C1 Cambridge Certificate)
- French (B2)

Awards and Certificates

- C1 Cambridge Certificate in Advanced English, 2018
- **Award for best Matura Thesis** "Developing a Game in Unity and C#", 2018, *Stiftung Jugendförderung* (Youth Development Foundation)

Other Work Experience

- Teaching Assistant, February 2021 September 2021, Swiss Civilian Service, Schule Bischofszell
- Kanti for Kids IT Course Instructor, 2017 & 2018, Kantonsschule Romanshorn
- Photography, Website Developer, 3D-Animation, January 2017 today, Freelance