

Viktor Krapivenskiy

Curriculum Vitae

ABOUT

Regarded by many as a computer programmer. Interested in techniques of writing clean and maintainable code, software design, compilers, parallel programming, systems programming. Author of a number of side projects. Participant of Google Summer of Code—2017.

SKILLS

Software design · Algorithms and data structures · C · C++ · POSIX API, Linux API · LLVM · Go · Python · Lua · JavaScript · Crystal · POSIX sh, bash.

EXPERIENCE

2017 · Summer of Code Intern (Google) · Implemented Lua scripting for the strace project (C, Lua).

2018 · Software architect (private company) · Implemented bots and various utilites for analysis of order flow and algorithmic trading on a number of cryptoexchanges (Python, MySQL, Redis); developed a web interface for accounting and monitoring of the status of trading bots in real time (Python, Flask, JavaScript); developed a log analyzer (C++).

2019 · C++ developer (contract with [Offscale](#)) · Developed [liboffkv](#), a uniform interface for distributed key-value storages, in a team of four; implemented C bindings; made a contribution to [ppconsul](#): transactions support (C++).

2019 · Software architect (contract with [Sikoba Research](#)) · Implemented support for LLVM in the verifiable computation framework [isekai](#) (Crystal). See the following articles for more information:

- [Isekai LLVM update #1](#);
- [Isekai LLVM update #2: conditionals and loops](#);
- [Isekai LLVM: final update](#).

2019 · Software developer (contract with [Fantom foundation](#)) · Developed tools for internal use.

2020 · Go developer (contract with [Offscale](#)) · Developed [goffkv](#) ([goffkv-consul](#), [goffkv-zk](#), [goffkv-etcd](#)) — a rewrite of [liboffkv](#) in Go.

AWARDS

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|------|---|
| 2016 | Prizewinner of the All-Russian Olympiad in Informatics, Finals |
| 2016 | Gold winner of the Individual Olympiad of School Students in Informatics and Programming, Finals |
| 2017 | 4 th place in “LAToken hackathon”: smart contract for tokenization of different kinds of assets |
| 2018 | 1 st place in “Global Changers” hackathon: client support bot system |
| 2018 | 1 st place in “IDACB & CryptoBazar hackathon”: chat based on proxy re-encryption protocol |
| 2018 | 1 st place in “Phystech.Genesis” hackathon: mobile application for traveling |
| 2018 | 3 st place in “CryptoBazar Serial Hacking: October”: PoC software raytracer using Intel SGX |
| 2018 | 1 st place in “CryptoBazar Serial Hacking: November”: LLVM IR interpreter with register-based VM |
| 2018 | Mentorship of two teams at “CryptoBazar Serial Hacking: December” that took 2 nd —3 rd places |
| 2019 | 1 st place in “CryptoBazar Serial Hacking: Grand Finale”: network traffic record/replay tool |
| 2020 | 2 st place in “VirusHack”: automatic detection of deviations in a video stream |

PROJECTS

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|--------------|---|
| 2016—present | luastatus , a universal status bar content generator |
| 2017 | support for Lua scripting in strace , Google Summer of Code—2017 project |
| 2020 | libdeci , an arbitrary-precision decimal arithmetic library for C |
| 2020—present | calx , a bc-like programming language |
| 2020 | “Speeding up decimal multiplication” , a research project |
| 2022 | “FiWiA” , a generator of x86-64 machine code for fixed-width multi-word arithmetics |

REFERENCES



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<https://github.com/shdown>



<https://www.linkedin.com/in/shdownnine>