# 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 |

# REFERENCES

shdownnine@gmail.com
https://github.com/shdown
https://www.linkedin.com/in/shdownnine