# VLADYSLAV FROLOV

Software Engineer

Kyiv, Ukraine

✓ frolvlad@gmail.com

♠ github.com/frol

## BACKGROUND

I learned the foundation of algorithms and data structures at school where I competed in a number of programming contests using Pascal. The algorithmic foundation helped me to solve complex problems optimally. Later, I taught myself C, C++, Python, JS, Rust, and other programming languages and technologies. Throughout my career, I have been into desktop, web, kernel, distributed systems, and machine learning developments, and I am eager to learn more and I love helping others to learn more.

## EDUCATION

September 2012 – **Master's Degree**, *Kharkiv National University of Radio Electronics*, *First Class Honours*.

June 2013 Security of Information and Communication Systems

"Research of Synthesis Methods of Nonlinear S-boxes for Block Symmetric Ciphers"

September 2008 – **Bachelor's Degree**, *Kharkiv National University of Radio Electronics*, *First Class Honours*.

June 2012 Security of Information and Communication Systems

"Security Analysis of WEP Protocol in 802.11 WLAN Computer Networks"

### EXPERIENCE

## Salford Systems

June 2012 – **Software Engineer (remote)**, Data Mining and Predictive Analytics Software company.

March 2018 Designed, led, and developed distributed data mining projects which handle big data loads. The team I led was in charge of solving all the technical problems (development and operations).

- Backend: Python, Cython, Python C-extensions, C, Flask, Django, Dask, PySpark, Celery, Hadoop HDFS, PostgreSQL, RabbitMQ, Redis, SeaweedFS
- Frontend: JavaScript (ES6), ReactJS, Redux
- O Operations: AWS, LINUX, DOCKER, HADOOP, FREEIPA, RANCHER, GITLAB, GITLAB CI, NGINX, JENKINS, PYINVOKE, ANACONDA

# Open-source (github.com/frol)

September 2009 – **Contributor**, open-source software.

I became a fan of open-source software the moment I consciously used it for the first time back in 2009, developing a small project in Qt. At that time, I had already been using Linux for over two years, but most of my projects were written from scratch, meaning that I didn't use any thirdparty libraries.

It was September 29, 2009, when the first project I published to the open-source was born. Since then I have open-sourced over 30 projects and contributed to over 100, including Linux kernel, Android for x86, Docker, and Django.

I am an active maintainer of some packages on Docker Hub and conda-forge (Anaconda Python).

My recent contributions are around Rust packages (cgroups integration, flatbuffers helpers, API ergonomics).

- GIT, LINUX, DOCKER, HEROKU, RUST, PYTHON, JS, TRAVIS CI, CIRCLECI

# Q-BIT (qbit.org.ua)

March 2015 - **Education Evangelist**, *local science community*.

I used to be a student at Q-BIT, and now I am helping new students (giving lectures and guiding). Q-BIT has its own online-platform that we use to teach programming and to conduct programming contests. I have designed, developed, and deployed <a href="the backend">the backend</a> in Rust and Python that does automatic compilation and execution of student solutions in over 15 different programming languages.

- LINUX, DOCKER, NGINX, RUST, PYTHON, C, BASH, JS, PHP, C++, PASCAL

# Escalibro (escalibro.com)

October 2010 - **Co-creator**, pet project.

This is a Web-service for writers and readers, that provides simple and convinient book writing and reading. I was involved in the every bit of the project: servers tuning, UI design, frontend and backend development.

- LINUX, PYTHON, DJANGO, CELERY, NGINX, MYSQL, RABBITMQ, HTML/CSS/JS

#### Fahrenheit 451

April 2011 – **Software Engineer**, Website building company.

May 2012 Developed a food delivery web-service for restaurant chains "Mafia" (mafia.ua) and "Yakitoria" (yaki.kh.ua)

- Python, Django, MySQL, HTML/CSS/JS

#### **EwaDev**

October 2009 - **Software Engineer**, Website building company.

December 2011 Developed a variety of websites and web-services

- LINUX, PYTHON, DJANGO, MYSQL, HTML/CSS/JS

#### Classes

2005 - 2009 **Student**.

I was taught algorithms and data structures in Pascal, and so I competed in a number of individual (IOI and alike) and team competitions. Later, I learned about desktop development and network design, which allowed me to implement a Direct Connect (DC) server from scratch and host a DC hub on a local city network.

- Pascal, Delphi, C++, Qt, Linux

# PROFESSIONAL SKILLS (my preferences are marked in bold)

Programming Rust  $\circ$  Python  $\circ$  Cython  $\circ$  JavaScript (ES6+)  $\circ$  Bash  $\circ$  C++  $\circ$  C  $\circ$  HTML  $\circ$  Languages SQL  $\circ$  LaTeX  $\circ$  PHP  $\circ$  Delphi/Pascal

Frameworks and Flask  $\circ$  ReactJS  $\circ$  VIM  $\circ$  Dask  $\circ$  Django  $\circ$  Celery  $\circ$  PySpark  $\circ$  Apache Spark Tools  $\circ$  Hadoop YARN  $\circ$  jQuery  $\circ$  NGINX  $\circ$  Apache  $\circ$  Anaconda  $\circ$  Qt  $\circ$  Docker  $\circ$  Git  $\circ$  Jenkins  $\circ$  OpenVPN  $\circ$  StrongSWAN  $\circ$  ...

Databases PostgreSQL o MySQL o SQLITE o RABBITMQ o REDIS o MONGODB o MEMCACHE
OS GNU/LINUX (DEBIAN, UBUNTU, CENTOS, ARCHLINUX) o MS WINDOWS o MACOS

#### LANGUAGES

Russian, Ukrainian Native

English Fluent