# IVAN FROLOV

## Back-end Developer

**(**416) 709-1633 Richmond Hill, ON in linkedin.com/in/frolvanya G github.com/frolvanya

## SUMMARY

A motivated 2nd year Computer Engineering student who has experience in Software development and designing code, as well as evaluating, and troubleshooting problems. During my education I gained experience in such languages as C++, JavaScript and Python. Moreover, I learned how to work with Oracle and MongoDB databases. I also have knowledge of working with cryptography, as I was contibuting to an open-source web3 project called Near Protocol. Seeking to use my existing skills and eagerness to learn further and implement new ideas in the development of new modern software by joining your team to expand my professional skills and gain valuable experience in the process of designing reliable software solutions.

#### SKILLS

Programming

Rust  $\circ$  Python  $\circ$  C  $\circ$  C++  $\circ$  JavaScript  $\circ$  TypeScript  $\circ$  SQL  $\circ$  HTML  $\circ$  CSS  $\circ$  WebAssembly

Languages

Frameworks and Rocket • Actix Web • Flask • NGINX • Docker • VIM • Git • Jira •

Tools OPENVPN SERVER • RPC API • REST API • JSON • MS OFFICE • DYNAMIC PROGRAMMING

Data Bases Oracle • PostgreSQL • MySQL • SQLite • MongoDB

OS MacOS • Linux • Windows

Languages English (fluent) o Ukrainian (native) o Russian (native) o German (basic)

### EXPERIENCE

## Open Source Contributions

## 01/2020 - Present GitHub Contributions, https://github.com/frolvanya

Developed and contributed to a wide range of projects and services, including:

- Backend services for NEAR blockchain
- Libraries to support blockchain development
- Console utilities for various purposes
- Telegram bots for automation and interaction
- Web services to provide online functionality
- Load testing tools for performance analysis

Additionally, responsible for server maintenance and service monitoring to ensure smooth operation.

3dEYE (3deye.me), Toronto, ON

#### 04/2022 – 08/2022 Software Developer Intern, Remote

- Simplified the initial device configuration process to enhance user experience.
- Developed and maintained scripts for camera management, including monitoring temperature, current status, and other device information.
- Gained hands-on experience with camera hardware and General-Purpose Input/Output (GPIO)
- Contributed to the overall improvement of device functionality and usability.

#### PROJECTS

#### NEAR Lake Framework, https://github.com/frolvanya/near-lake-framework-py

- Data streaming application for Near Protocol data stored in an AWS S3 bucket
- Asynchronous functions to list blocks and fetch streamer messages
- Utilized AWS SDK for Python (Boto3) to interact with S3
- Parsed and processed Near Protocol data and handled complex data structures

#### Load Testing Tool, https://github.com/frolvanya/load-testing-tool

- Load testing tool in Rust for testing websites and web services
- Provides options for concurrency, proxy usage, and error handling
- Tracked the number of spawned requests and failed requests using atomic counters for concurrency
- Proxy server usage, allowing the tool to send requests through proxies for testing network configurations

## EDUCATION

09/2022 - 06/2026 **BEng, Computer Engineering**, Kharkiv National University of Radio Electronics, Ukraine - Networking, C++, OOP, Databases, Operation Systems design

09/2022 – 04/2024 Ontario College Diploma, Seneca College, Computer Programming

GPA: 3.7/4.0

– Computational Thinking, C/C++, JavaScript, WEB, OOP, Databases, Software Testing, Linux/UNIX

2014 – 2022 Q-bit, IT School, Ukraine

- Algorithms & Data Structures, Rust, Python, C++, Ubuntu Linux

## OTHER

Volunteering: Volunteered at KiberOne School (Vienna, Austria) as a Junior Software Developer (remote) and developed a manager that works using OpenAI api, scraping facebook leads and WhatsApp webhooks for managing KiberOne IT School for 2 months (2023).

Work Permit until: 25.05.2025