

Mike Lubinets
Senior Rust Developer

- ▶ Living in UAE | Abu Dhabi
- Open to relocation

### Skills

GNU/Linux	10+ yrs.
Rust	5+ yrs.
Research & Development	4+ yrs.
Computer Networks	2+ yrs.
Distributed legder technology	3+ yrs.
Web development	3+ yrs.
Embedded Systems	2+ yrs.
English	C1

### **About**

I am a Rust enthusiast who enjoys taking part in creation of new products and making them reliable and loved.

Currently I'm looking for on-site opportunities in UAE or relocation options in other countries, which would allow me to grow in the systems development, networks, software design and security while I'm preparing for my MSc.

I'm looking forward to working with awesome people and I'll be doing my best to ensure you have the cleanest type-driven APIs in the software that's reliable and performant.

If this profile fits you, you are very welcome to reach out.

# Work experience

#### Senior Security Engineer

Sep/2021 - today

Technology Innovation Instutute Digital Science Research Centre

Being an engineer in a research institution, my responsibilities spanned across variery of fields and support jobs for the research personnel. This included tooling development, infrastructure design and maintenance, security research of both software and hardware (Software Engineering, DevOps, SRE).

During my occupation, I have

- developed various tools, e.g a triager for vulnerability classification to aid fuzzing.
- designed and implemented an infrastructure architecture of a distributed fuzzing platform.
- implemented initial stages of security research with a number of hardware targets, to provide research personnel with insigt data.
- setup and maintained department IT services (DevOps/SRE).
- setup and maintained physical infrastructure, virtualization, and networks.
- prepared and hosted a number of internal technical demo events.
- hosted a technical workshop at BlackHat conference in Las Vegas.
- lead hardware aquizition process for the department needs.

 $Technical\ Stack$ : Rust, C++, Python, CLang Sanitizers, AFL++, QEMU/KVM, Kubernetes

### Education

2016 - 2018

Computer Science (B.Sc.)

Innopolis University

GPA: 3.44/4

Bachelor's thesis: "Modular Language Server for SLang Programming Language".

2014 - 2016

#### Computer Science (B.Sc.)

Saint Petersburg State University of Aerospace and Instrumentation

# **Projects**

- aquamarine
   Inline diagrams for rustdoc, used by Google
- reed-solomon-rs
   Reed-Solomon BCH implementation in Rust
- batch-resolver
   Batch asynchronous DNS resolver
- disciplinator
   Hobby project to break sedentary
   lifestyle using FitBit API
- crates.io/users/mersinvald
   Other small libraries and tools contributed to Rust ecosystem

# **Interests**

- Hiking
- DIY
- Programmable Keyboards
- Cooking
- Winter Sports

# **Contact**

- +49 176 27 95 28 13
- me@mkl.dev
- github.com/mersinvald

#### Senior Rust Developer

peaq GmbH

Oct/2019 - Jul/2021

My main occupation at peaq was the production of the peaq DLT platform and the related products. I have been working on the smart contracts execution runtime, blockchain storage, and the implementation of the business requirements into the smart contracts running on the said platform.

During my time at peaq, I have

- successfully delivered the IoT and business logic parts of the technical PoC demo for the big partner in German automotive industry.
- designed and implemented the core layer of the blockchain-backed role based access control system, which later became the company's flagship product.
- lead the integration of the said RBAC system at the NTT datacenter, in partnership with FATH Mechatronics.
- helped two junior emloyees in their onboarding and integration into the project.
- been a part of the great hard-working team, which didn't miss a single tight deadline (and there were many!).

 $Technical\ Stack$ : Rust, C++, CLang Sanitizers, Exonum, RocksDB, GitLab CI, Docker

#### Rust Developer

Jul/2018 - May/2019

Ethereum Classic Labs EVM/Compiler Team Tooling Team

I was in charge of development and maintenance of the SputnikVM Ethereum Virtual Machine, as well as its integration into several Ethereum Clients, such as go-ethereum and multi-geth.

Later, I switched to the tooling team, and worked on the Rust instruments around the OpenRPC protocol definition standard.

During my time at ETCLabs, I have

- released SputnikVM 0.11, that allowed integration of the VM into the cross-chain clients that support multiple Ethereum-based networks.
- streamlined the EVM testing framework used by SputnikVM, which allowed us to use whole Ethereum VM test suite.
- implemented support of Spurious Dragon, Byzantium and Constantinople sets of EIPs.
- maintained a number of other products implemented in Rust.

Technical Stack: Rust, C, Go, JsonRPC, Ethereum, Jenkins CI, Docker, Vagrant

#### Freelance Rust Developer

Oct/2017 - Jul/2018

Zamar AG

As a freelance Rust developer I implemented a number of services for the client Airline Baggage processing system, including IATA/BagMessage protocol implementation in Rust.

Each module has been designed to be panic-free, highly reliable and performant.

Technical Stack: Async Rust, Tokio, SOAP, PostgreSQL

### Systems C Developer

Mar/2017 - Jul/2018

AnP Workcell Systems Software Team

In the Systems Software team, I have

- ported low-level parts of *uclibc-ng* to the *Elbrus e2k* processor architecture.
- established a continuous integration infrastructure for running automation tests of the E2K builds of the Linux Kernel and libc.
   The integration of the generated test reports with Gitlab Issues have helped our team tremendously with keeping track of thousands of regressions.

Technical Stack: C, GDB, Valgring, GNU/Linux, Gitlab CI

#### Trainee Embedded C++ Developer

Nov/2015 - Jul/2016

GK Scout

New Products R&D Team

On my first job, I got the experience intoductory to the embedded development with Cortex-M, and to the product software development in general.

During my internship, I have

- implemented a NAND-flash driver with wear-levelling and Reed-Solomon BCH based error correction.
- improved speed and reliability of the proprietary networking protocol implementation which allowed transport of 3x bigger packets on the same MCU.
- unexpectedly become an only developer on a prototype firmware project and finished it before the scheduled release date.

Technical Stack: Embedded C, C++, ARM Cortex-M, GDB, JTAG

## Recommendations

#### **Eugene Zouev**

August 2019, Senior Thesis Advisor

Professor — Innopolis University eugene.zueff@gmail.com

It is my pleasure to write this letter of recommendation for Mikhail Lubinets, whom I have known for 3 years as a student of Innopolis University. I was a supervisor for Mikhail's undergraduate research and taught several classes that he took as a part of his educational program.

As a student, Mikhail always displayed a consistently high level in all of my courses and his grades are a good indicator of his abilities. However, it doesn't end there, as a truly investigative person, Mikhail always went an extra mile to extend his knowledge and skills, when interested in some topic. Having observed Mikhail in several courses ("Introduction to Programming II" and "Functional Programming and Scala"), that involve collaboration with other students, I can tell that he makes a good team player: responsible and always ready to help.

Mikhail has graduated from Innopolis with a BS thesis project "Architecture of Modular Language Server for the SLang programming language" under my supervising. During his undergraduate research, Mikhail demonstrated strong work ethic, professionalism, and high motivation. He is quite disciplined, organized person; he has never had any trouble with meeting deadlines for his assignments.

On a personal level, Mikhail can be characterized as a very sympathetic and communicative person. To sum up, I strongly recommend Mikhail as a candidate for a research or work position without any reservations.

Should you have any more questions feel free to contact me for further information.

#### Alena Iureva

August 2019, Fellow Student

MSc in Data Engineering — Jacobs University Bremen aiureva@jacobs-university.de

Leading a student community is a busy and challenging thing to do, and I am happy I had Mike here nearby, with him taking care of study groups on courses he was best at, and helping out at admin stuff like planning and supplies.

He is, as well, a true enthusiast and evangelist of Rust, who eventually got me to try the language and start contributing to open-source time to time, which led me to overall wider communication with international IT community.

Mike has been leading by example, and a lot, being highly competitive and pushing us all to test our limits in abilities to accomplish better results, faster, showing example of impeccable confidence and I-can-do-it attitude. At the same time, he is always ready to help should someone be asking or seeking answers, taking his time to explain, review or give feedback.

Overall, I see him as someone who really enjoys his work and wants to acquire as much expertise at it as possible, and I still keep hearing about projects he starts in his free time, or exciting new technologies he's currently learning.

#### Darcy Reno

March 2019, Direct Manager

Managing Director at ETCDEV Team linkedin/darcyreno

Mike is a pleasure to work with - He has an excellent work ethic and is always looking for ways to make improvement in the product, the process and himself. I would gladly work with him in the future!