

ALEKSEI DURNOV

Researcher & C/C++ Developer (Network Traffic Analysis)

 @Panterrich  github.com/Panterrich  www.linkedin.com/in/aleksei-durnov-89201b216
 Moscow, Russia  +7(980)513-92-12  durnov.an@phystech.edu

EDUCATION

Bachelor of Radio Engineering and Computer Technology Moscow Institute of Physics and Technology

 September 2020 - June 2024

- CGPA: 8.8/10.0 (4.91/5.0).
- Top 6 department graduates.
- Thesis topic: «Automatic generation of network protocol signatures».

Master of Radio Engineering and Computer Technology Moscow Institute of Physics and Technology

 September 2024 - Present

EXPERIENCE


Laboratory Assistant (Researcher & C/C++ Developer) Institute for System Programming of the Russian Academy of Sciences

 June 2022 – Present  Moscow

- Developed module for RTSP protocol for DPI system «Protosphere».
- Conducted a comprehensive survey of protocol tunneling attacks.
- Conducted research work «Analysis of distorted sequences». Created verifiers with sequential memory access to such file formats as zip, 7z, rar, png, tiff, rtf for model checking system. Also realized many decoders: Deflate, LZMA, CCITT G3, LZW, RLE, ASCII Hex, ASCII85.

Student Mentor

Educational course «Introduction to Industrial Programming in C», MIPT, Lector: Ilya Dedinsky @ded32

 September 2021 – Present

- The course covers base data structures and algorithms, final project – own programming language.
- Mentor a group size of 10-20 students each year.
- [My page on wiki.mipt.](#)

TECHICAL SKILLS

Programming languages

C, C++, Go, Python

Technologies

Linux API, Boost, MPI, OpenMP

Languages

English - intermediate

Other

Networks, machine learning, computational maths

PET PROJECTS, COURSES

Machine Learning

MIPT course, Lector: K.V. Vorontsov

 [Github](#)

Learned the basics of machine learning in regards to applying them to my research.

Development on GoLang

MIPT course

 [Github](#)

The course is based on [Shad Yandex](#).
Gitfame is the main project for the course.

Concurrency

MIPT course, Lector: Roman Lipovsky

The course introduces a new viewpoint on asynchronous programming. It covers synchronization primitives, schedulers, functional futures, fibers and coroutines.

SSH

 [Github](#)

Own implementation of SSH. Supports symmetric and asymmetric encryption, multi-user connection, file copying, Reliable UDP protocol implementation.

JCC

 [Github](#)

AOT compiler written for JPL. JPL is its own turing-complete programming language. Its main feature is that you can code a program in it both in hiragana and romaji (Latin).

INTERESTS

- Powerlifting
- Photography, student photo studio.