DEMENTEV DANIIL

SOWTWARE ENGINEER

+7 (912) 605-35-52
https://github.com/dementev-dv
ddaniild@list.ru
Moscow, Russia
https://t.me/krutoi_muzhik

CORE COMPETENCIES

- C/C++
- Git
- Muthreading programming on linux using POSIX standarts, OpenMP, MPI
- x86 / Arm Assembly
- Python
- Build systems make / cmake
- Computer microarchitecture knowledge
- Operational systems knowledge
- ANTLR
- Intel Intrinsics optimizations
- Nvidia Cuda for GPU Computing
- Verilog

ADDITIONAL SKILLS

English level:

Upper Intermediate (B2)
- FCE certification (2019)

Passions
- Basketball
- Programming

WORK EXPERIENCE

Institute of System Programming RAS (2022 - present)

Linux kernel fuzzing team - intern developer

Correction of errors in Linux filesystems - jfs, ntfs, jffs2.
Setting syzkaller for fuzzing the Linux Kernel modules.
Usage of qemu, gcov, xfstests for testing Linux filesystems.
Usage of xfstests and Linux MTD Drivers for flash-filesystems testing.

EDUCATION

MIPT BSc (2020 - 2024)

Department of Radio Engineering and Computer Technologies

Graduation project - “Automated testing system for JFFS2 filesystem”

COURSES

MIPT
- Ilab - Introduction to Industrial Programming in C
- Parallel Programming - OpenMP / MPI
- Concurrency - concurrent and parallel programming in C++
- Advanced operational systems and synchronization theory
- Computational mathematics in python

ISP RAS
- Development of optimizing compilers
- Advanced computer architecture

PERSONAL PROJECTS

Differentiator

Lexical scan of input math expression and building it into the syntax tree. Building the new tree for the derivative of the input expression and analyzing its tree to simplify the answer. Detailed info in the Readme file.
https://github.com/dementev-dv/Differentiator

PythonOutline

Analizing the input python code with ANTLR nad adding to SQL database all classes and functions. It is using 2 different ways for traversal of a tree - visitor and listener. Detailed info in the Readme file.
https://github.com/dementev-dv/PythonOutline