Mariia (Mary) Feofanova

Email: mary.fifa3000@gmail.com Github: mary3000 Mobile: +79168354966

EDUCATION

Moscow Institute of Physics and Technology [planned]

Moscow, Russia Sept. 2020 - Aug. 2022

Master's degree in Computer Science

Moscow, Russia

The Yandex School of Data Analysis

Sept. 2019 - Aug. 2022 (Present)

Big Data Infrastructure

Moscow Institute of Physics and Technology Bachelor of Applied Mathematics and Computer Science Moscow, Russia

• Thesis: Verification of synchronization primitives and concurrent data structures

Sept. 2016 - Aug. 2020 (Present)

EXPERIENCE

JetBrains

St. Petersburg, Russia (remote)

Research Intern, Programming Languages and Tools Lab

July 2020 - Aug. 2020

C LLVM

• Verifying concurrent C programs under weak memory model with GenMC model checker.

Google

London, UK

• SWE Intern, Android App Compat team

July 2019 - Sept. 2019

GoLang Java Android C++ Protobuf SQL

- Analyzed statistics about Android API usage and wrote design document about its utilization.
- Integrated statistics into Android source code presubmit checker: now it warns if pull-request changes will break popular apps.

Moscow Institute of Physics and Technology

Moscow, Russia

Teaching Assistant, "Theory and Practice of Concurrent Computing" course C++ x86 Assembly

Feb. 2019 - Present

o Holding seminars, reviewing homework, improving test infrastructure.

JetBrains

Moscow, Russia

SWE, RubyMine team SWE Intern, RubyMine team Oct. 2018 - Feb. 2019 Jul. 2018 - Aug. 2018

Java Ruby Ruby on Rails

- Developed new intentions, inspections and refactoring options (e.g. introduce parameter) for RubyMine IDE.
- Improved Rails-specific refactoring system: model fields, associations support.

PROJECTS

Model checker for concurrent programs [Bachelor thesis]

Moscow, Russia

C++

Nov. 2019 - May 2020

Wrote model checker that tests concurrent C++ programs. Key feature: code doesn't need to be translated to formal language (like TLA+ / +Cal). Verified my work on non-trivial examples: ABA bug inside lock-free cache for Yandex allocator (finds bug 16 times faster than +Cal) and bug inside implementation of Executors framework.

InclickDB

Moscow, Russia

GoLang Python Grafana Graphite ClickHouse InfluxDB

May 2019

Investigated possible solutions to a problem of migrating from InclickDB to ClickHouse for a monitoring system with tagged metrics. Created tag support in existing solution by teaching myself Golang and contributed to open-source: pull-request.

ACHIEVEMENTS

Photo Lab Live Challenge: Go Viral or Go Home - I place [Hackathon] Python web.py Heroku

Moscow, Russia

Nov. 2018

Developed backend for photo filter that changes clothes style, having only 48 hours was able to quickly learn python framework and to deploy MVP.

Programming Skills

- Languages: C++, GoLang, Java, Python, TLA+, +Cal.
- Technologies: SQL, Git, LATEX, Docker.
- Knowledge: Algorithms, Data Structures, Concurrent Computing, Distributed Systems.