Andrei Tonkikh

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Education

Higher School of Economics, Saint-Petersburg, Russia *2019–Present*

- M.S. in Computer Science (Expected June 2021)
- Studying the theory of Distributed Computing

Higher School of Economics, Saint-Petersburg, Russia *2018-2019*

- B.S. in Computer Science (continued)
- With focus on Cloud Computing

St. Petersburg Academic University, Saint-Petersburg, Russia *2015-2018*

- B.S. in Computer Science (transferred)

Work Experience

Junior SWE at Yandex, Saint-Petersburg, Russia *Since January 2019*

- Developed a prototype and currently working on a production implementation of a new fair job scheduling algorithm that allows the service to provide flexible resource guarantees to the users. The algorithm works on large clusters of tens of thousands of servers and allocates resources to many thousands of concurrently running operations.

SWE Intern at Yandex, Moscow, Russia *July – December 2018*

- Enhanced job scheduling algorithms for YT – the largest distributed computing platform at Yandex.

SRE Intern at Google, London, UK *July – September 2017*

- Was part of Traffic Team SRE and improved the black box monitoring system for Google Cloud Engine.

Academic Projects

BFT Reconfiguration

- In an ongoing project I am working on the problem of asynchronous dynamic reconfiguration of quorum systems in arbitrary (a.k.a. Byzantine) fault-tolerant distributed systems.

Open Source Contribution

Packer Plugin for vSphere *Fall 2017*

- Automated creating virtual machines and OS installation in vSphere environment. The project is widely used in JetBrains infrastructure. It is written in Go programming language.
- *github.com/jetbrains-infra/packer-builder-vsphere*

Rust Standard Collections Library *Spring 2016*

- Contributed to the implementations of B-Tree and Binary Heap in Rust standard library.
- *github.com/rust-lang/rust/pull/33947* and *github.com/rust-lang/rust/pull/32987*

Other Skills

Programming languages: C++, C, Go, Kotlin, Java, Rust, Python, SQL

Skills: Storage Systems, Concurrent Programming, Operating Systems, Linux Kernel Programming

Technologies: MapReduce, PostgreSQL, Hadoop, Spark, Hive, LaTeX