

Andrei Tonkikh

☎ Phone: +7(904)856-51-29
✉ Email: andrei.tonkikh@gmail.com

🐙 GitHub profile: xosmig
🌐 LinkedIn profile: andrei-tonkikh

SUMMARY

I am a computer science student with experience in both professional software development and academic research. I have found my passion in distributed computing because it is one of the most challenging and versatile areas of computer science. I am always ready to face new challenges and I am not afraid to take on difficult problems. I am motivated by my aspiration to push the boundaries of human knowledge.

EDUCATION

Ph.D. in CS, intended

M.Sc. in CS, NRU HSE, Saint-Petersburg, Russia 2019 – 2021
• Graduation expected in June 2021.

B.Sc. in CS, NRU HSE, Saint-Petersburg, Russia 2018 – 2019

PUBLICATIONS

R Guerraoui et al. “**Dynamic Byzantine Reliable Broadcast.**” OPODIS 2020 (*in press*)

P Kuznetsov, A Tonkikh. “**Asynchronous Reconfiguration with Byzantine Failures.**” DISC 2020

- Video presentation: www.youtube.com/watch?v=pWgseNI-gIg
- Extended version: arxiv.org/pdf/2005.13499.pdf

D Collins et al. “**Online Payments by Merely Broadcasting Messages.**” DSN 2020

- Nominated for the best paper award.
- Extended version: arxiv.org/pdf/2004.13184.pdf

ONGOING PROJECTS

Fast and Scalable Byzantine Consensus

- In an ongoing project I am working on a new partially synchronous Byzantine fault-tolerant state machine replication protocol with improved performance characteristics.

WORK EXPERIENCE

Research Intern at Télécom Paris, Palaiseau, France March 2020 – April 2020
• Studied asynchronous reconfiguration of Byzantine fault-tolerant distributed systems.

Junior SWE at Yandex, Saint-Petersburg, Russia January 2019 – February 2020
• Developed a novel job scheduling algorithm for a large scale distributed computing platform. The new paradigm distributes resources more efficiently and provides more rigorous performance guarantees.

SWE Intern at Yandex, Moscow, Russia July 2018 – December 2018
• Enhanced job scheduling algorithms for YT – the largest distributed computing platform at Yandex.

SRE Intern at Google, London, UK July 2017 – September 2017
• Was part of Traffic Team SRE and improved the black box monitoring system for Google Cloud Engine.

OTHER SKILLS

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

Hard skills: Distributed Systems, Databases, Concurrent Programming, Cryptography, Game Theory, External Memory Algorithms, Operating Systems, Linux Kernel Programming, OS-Level Virtualization