

Skills

- **Tech:** Go, Rust, Python, Erlang, Linux.
- **Areas:** distributed systems, databases, storages, streaming, cloud/edge, low-latency, math.
- **About:** passionate about reifying ideas into high-quality, fast and reliable systems; love non-trivial problems, open-source and meaningful projects.

Work Experience

- **VK**
Lead Software Engineer in the Cloud Solutions *April 2021 - March 2022*
 - Designed, implemented and deployed into production new highly scalable low-latency rate limiting system for the public cloud.
 - Performed tech analysis of the public S3: detecting bottlenecks, code inefficiencies, finding and improving system and architecture issues etc.
 - Designed new architecture for the S3-compatible storage service from the ground up (data, metadata and S3-API layers) and implemented MVP.
- **Anytype.io** Berlin, Germany
Senior Software Engineer *May 2020 - April 2021*
 - Significantly improved scalability, efficiency and performance of ThreadsDB (open-source distributed serverless database).
 - Contributed new features and numerous improvements to the core library of the project.
 - Conducted research and technology risk mitigations.
- **IqOption Ltd.** St.-Petersburg, Russia
Senior Software Engineer *August 2017 - May 2020*
 - Developed risk management system: highly available group of data intensive microservices responsible for the trading decision making, estimation of profits and losses and generating various analytic insights in a real-time.
 - Developed real-time pricing computation engine, generating prices of derivatives based on a set of rules and market volatility.
 - Developed low-latency market volatility estimation service.
 - Analysis and implementation of risk and pricing models.
 - System design, ensuring consistency and HA, profiling and fine-tuning.
 - Created infrastructural tools for the internal use.
- **Syncleo Ltd.** St.-Petersburg, Russia
Software Engineer *April 2017 - August 2017*
 - Created transport subsystem for the smart appliances.
 - Developed HTTP-MQTT gateway service.
 - Created universal push notification service working with both APNs and FCM.
 - Enabled device voice control with both Alexa Custom Skill and API.AI.

- Developed auxiliary internal services and tools.

- **Ready for Sky Ltd.** St.-Petersburg, Russia
Software Engineer *March 2016 - April 2017*
 - Software development in the field of IoT and remote control of smart things. Created core communication system (from architecture and protocols design to production), enabling communication of various types of smart appliances and mobile applications.
 - Developed Amazon Alexa skill enabling voice control of smart appliances.
 - Created a bunch of various internal services: logic, geolocation, monitoring etc.
- **State University of Telecommunications, IoT research lab** St.-Petersburg, Russia
Assistant Professor *September 2012 - February 2016*
 - Research in the field of self-organized networks, IoT and its applications.
 - Conducted teaching courses on mathematical methods and models for networks, mathematical methods of optimization and Python for scientific calculations and data analysis.
 - Lab activities: software development for IoT appliances, tools for timeseries analysis, special-purpose high-level flow-based network simulator etc.
- **Digiton Research Ltd.** St.-Petersburg, Russia
Software Engineer, Analyst *April 2010 - February 2012*
 - Industrial research in the field of multiprocessor grid-systems.
 - Software development (C/C++, network).

Education

- **St.-Petersburg State University of Telecommunications** St.-Petersburg, Russia
Candidate of Sciences (Ph.D. equivalent) in Systems and Networks *2011 - 2014*
 - Networks Department (Full Scholarship, Cum Laude)
 - Thesis focused on a fine-grained real-time traffic engineering, predictions and optimization.
 - Developed and investigated novel approach for the traffic balancing with a P2P-overlay network assistance.
- **St.Petersburg State University of Telecommunications** St.-Petersburg, Russia
Engineering degree *2003 - 2009*
 - Graduated Cum Laude in the field of networks and switching systems