

Sergei Volkov

Curriculum Vitae

Personal

Citizenship **Russian**
Languages **Mother tongue: Russian**
English: C1 ()
German: B1 ()
Driving license **European Driving License: B, C**
GitLab/GitHub **gitlab.com/taranarmo, github.com/taranarmo**
LinkedIn **www.linkedin.com/in/taranarmo**

Education

2010 – 2015 **Specialist degree in Energy Supplies**, *Petrozavodsk State University*

Work experience

Aug 2023 – **Data scientist**, *Crocus Labs GmbH*
Feb 2024 Software development, Software architecture, Product design, Project management, Testing, Team leading
Despite position name my job was primarily software development as the product wasn't ready at my arrival
Jun 2021 – **PhD Student**, *Leibniz-Institut für Gewässerökologie und Binnenfischerei (IGB Berlin)*
Mar 2023 Research design, Data processing, Field work, Linux systems administration, DevOps
Partial employment as a PhD study salary. Wasn't finished due to low performance and wrong expectations from both sides.
Oct 2020 – **Data QA**, *Playrix*
Feb 2023 Data analysis, Validation, ETL design, Manual and automated QA
QA in data engineering and then product team. SQL, Python, Apache Spark, Analytics, RegEx, psql, Bash.
Mar 2020 – **QA engineer**, *Playrix*
Oct 2020 Manual QA, Automation, Teaching, Testing documentation writing, MitM traffic sniffing, Statistical analysis
Nov 2019 – **Data analyst**, *Playrix*
Feb 2020 Data analysis, Automation, User tracking events design, Reporting and presenting to stakeholders
SQL, Python, Analytics, DataViz, BigData
May 2016 – **Teaching assistant**, *Petrozavodsk state university*
Jul 2020 Educational program design, Lecturing, Teaching
Thermodynamics, heat transfer and other courses
Jan 2016 – **Research assistant**, *Northern water problems institute*
now Data analysis, Field work, Experiment design, Data processing frameworks development, Academic writing, editing and typesetting

Technical Skills

Development Currently I'm using **Python** (numpy, pandas, sqlalchemy, matplotlib), loving **Julia** and learning **Nix**, **Linux** user since 2009 (Bash/zsh for scripts and oneliners, system management, remote server administration via **SSH**).

Can write complex **SQL** query statements (with analytic/window functions, subqueries, optimization etc.) and do simple DBMS management in both SQL-like and **NoSQL**.

Able to work with **Docker** and other containerization tools, used Docker container as an environment to compile MATLAB package with external dependencies including OpenCV via CMake

Designed a **AWS** architecture for a **IoT** application (smart lamps for green houses)

Built a simple **IoT** showcase using Docker.

Familiar with **MATLAB**, learned **JS** and **C/C++** a long time ago (can read and write not to complex code).

Communication skills

- Presenting
- Teaching
- Feedback sharing
- Active listening

Organisational / managerial skills

- Field work organizing
- Managing small team of developers
- Project management

Projects

2015 – 2017 **Lake Onego: life under the ice, NWPI**

Research and field work

Joint interdisciplinary project to study the under-ice life

2021 – 2023 **Lake pycnoclines trap organic particles forming hot spots of accelerated carbon cycling in the water column (PycnoTrap), IGB Berlin**

Joined interdisciplinary project researching sinking and degradation of biomass in the turbulent environment (lake water column)

Awards - Certifications - Licenses

2017 **Machine Learning**, Stanford University at Coursera

Certificate available at <https://www.coursera.org/account/accomplishments/verify/U4VGJWXFGMS9>

Voluntary

2013 – 2015 **Garbage collection**, On multiple sites near Onego Lake, Petrozavodsk, Russia

2011 – now **OpenStreetMap**, Data surveys and contribution, Republic of Karelia, Russia

Thesis

2015 **Noniterative heat exchanger calculation**

Supervisor: Professor Sergei Bogdanov

The thesis proposes direct analytical calculation procedure for heat exchanger design, avoiding using of optimization techniques

Publications

- 2021 **Full Reynolds stress tensor of convective turbulence estimated with paired acoustic Doppler current profilers**, *S. Bogdanov, G. Kirillin, S. Volkov, G. Zdrovennova*
- 2019 **Fine scale structure of convective mixed layer in ice-covered lake**, *S. Volkov, S. Bogdanov, R. Zdrovennov, G. Zdrovennova, A. Terzhevik, N. Palshin, D. Bouffard, G. Kirillin*
- 2019 **Under-ice convection dynamics in a boreal lake**, *D. Bouffard, G. Zdrovennova, S. Bogdanov, T. Efremova, S. Lavanchy, N. Palshin, A. Terzhevik, L. Vinnå, S. Volkov, A. Wüest, R. Zdrovennov, H. Ulloa*
- 2019 **Structure and dynamics of convective mixing in Lake Onego under ice-covered conditions**, *S. Bogdanov, G. Zdrovennova, S. Volkov, R. Zdrovennov, N. Palshin, T. Efremova, A. Terzhevik, D. Bouffard*
- 2018 **Albedo of a Small Ice-Covered Boreal Lake: Daily, Meso-Scale and Interannual Variability on the Background of Regional Climate**, *G. Zdrovennova, N. Palshin, T. Efremova, R. Zdrovennov, G. Gavrilenko, S. Volkov, S. Bogdanov, A. Terzhevik*

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