


Dmitry Dolgov

 erthalion.info

PROFESSIONAL PROFILE

Talented senior software engineer with strong technical and mathematical background. Have deep experience in the designing, developing, deploying and conducting performance analysis of large-scale systems. Contributor of many open source projects, including PostgreSQL, Linux kernel and GHC. An active member of the PostgreSQL community and Haskell enthusiast.

CAREER SUMMARY

- 2022–date **Senior Software Engineer, "Red Hat"**.
Development of RHACS, mostly concentrated around the BPF agent.
- 2017–2021 **Senior Software Engineer, "Zalando"**.
Responsible for databases infrastructure (PostgreSQL) and performance optimization in different environments (DC, AWS, Kubernetes), including development of tools and services for this purpose. Previously was taking part in development of internal CI/CD infrastructure, maintenance of applications in data centers, and development of new cloud native solutions on Kubernetes.
- 2013–2017 **Scientific Assistant, "KemSU"**.
Research and development of novel computational method for simulating an artificial human heart valve.
- 2012–2013 **Software engineer, LLC "DM Group(Direct)"**.
My responsibility was developing multiple B2B modules for the Direct service with complex business logic and processes.
- 2010–2012 **Software developer, LLC "Edison"**.
I took part in successful development and launch of multiple web services and applications for Windows and mobile platforms (iOS, Android).

SKILLS AND COMPETENCIES

Backend	PostgreSQL, Linux, Docker, Kubernetes, MongoDB, AWS, Django
Programming languages	Python, C, Haskell, Clojure, Golang, Bash
Frontend	JavaScript, CoffeScript, AngularJS, Ember.js
Tools	Vim, Git, Perf, Latex, Gdb, Ansible
Mathematics	Solving systems of nonlinear equations by different numerical methods. CFD.

PROJECTS

- PostgreSQL Development of various patches for PostgreSQL, including new Jsonb functionality and syntax, additional support for pluggable storage, bugfixes and doing patch review.

postgres-bcc A bcc-like set of tools to monitor low-level information about PostgreSQL using BPF

pg_simdjson PostgreSQL extension for creating jsonb objects using simdjson parser.

patroni A template for PostgreSQL High Availability

postgres-operator Kubernetes operator for management of PostgreSQL clusters on Kubernetes

jsonbx jsonbx extension for PostgreSQL 9.4, and corresponding patch for PostgreSQL 9.5

Postgraduate work CFD complex for simulating an artificial human heart valve.

Graduate work Computational program to simulate the movement of waves.

EDUCATION

2012–2017 **Postgraduate, KemSU.**
Specialty Mathematic modeling, numerical methods and program systems.

2007–2012 **Graduated mathematician-system programmer, KemSU.**
Specialty Applied mathematics and information science.