Dmitry Bogdanov

CONTACT
INFORMATION

Postgraduate Student
Ioffe Physical Technical Institute
26 Polytechnicheskaya
Saint-Petersburg, 194021, Russian Federation

Mobile: +79218459027
E-mail:
dima.delmar@gmail.com

JOB TITLE   **Software developer**

KEYWORDS   Java 6,7,8, J2EE, Design Patterns, Enterprise Integration Patterns, SOA, C#, .NET Framework, C++, Concurrency Framework, Spring Framework, ActiveMQ, JMX, JMS, PostgreSQL, Riak, Maven

EDUCATION   **Saint-Petersburg State Polytechnical University**, Saint-Petersburg, RF

Ph.D., Fluid, Gas and Plasma mechanics, July 2016

- Thesis Topic: *Numerical simulation of heat transfer through spacecraft surface for a weakly ionised hypersonic flow*
- Adviser: Senior Scientist Poniaev S.A.
- Area of Study: Computational Fluid Dynamics, Aerospace, Aerodynamics, Plasma physics

M.S., Applied Mathematics and Physics, July 2012

- Thesis Topic: *Numerical simulation of an air flow inside a cyclone filter and implementation of a Shur-Spalart curvature-correction term for $k - \omega$ SST turbulence model*
- Adviser: Senior Scientist Poniaev S.A.
- Area of Study: Computational Fluid Dynamics, Aerodynamics

B.S., Applied Mathematics and physics, July 2010

- Thesis Topic: *Numerical simulation of supersonic flows*
- Adviser: Docent Bulovich S.V.
- Area of Study: Computational Fluid Dynamics, Aerodynamics

REFEREED
JOURNAL
PUBLICATIONS

[1] Bogdanov D.A., Bulovich S.V. Numerical simulation of hypersonic flow over forward-facing step. *International conference of XXXIX science-week SPBSTU materials.* Pages: 20–22. 2010. Link

[2] Bogdanov D.A., Ponyaev S.A. Numerical simulation of turbulent flow in a cyclonic separator. *Journal of Physics, Conference Series, Vol. 572, 2014, 012056* Link

PROFESSIONAL
EXPERIENCE

Speech Technology Center, Saint-Petersburg, RF
Software Developer   **July 2013 to present**

- Currently responsible for server components of highload system for speech recognition, sound processing and tracking. (SOA, J2EE, Spring, .NET, Concurrency, JNI, JMX, JMS, ActiveMQ, MVC, Maven, Ant, PostgreSQL, Riak, Tomcat, Mercurial, Subversion, Intellij IDEA, Visual Studio, ReSharper, TeamCity, CentOS)

GGA Software, Saint-Petersburg, RF

Software Developer   **February 2012 to July 2013**

- Architecture and implementation of workflow processing and visualization system for **Biodatomics** project. (Java, Ruby on Rails, Concurrency, PostreSQL, Apache Hadoop, Javascript, jQuery, Backbone.js, Git, Intellij IDEA and RubyMine)

- Server-based PDF parsing for highly accurate content-recognition and building HTML-representation of parsed PDF on desktop and mobile platforms for **Bibliorossica** project. (JavaSE, Tomcat, Hibernate, Concurrency, Spring, Spring-MVC, Spring integration, ImageIO, C++, PDF parsing, PostgreSQL, JSP, Javascript, jQuery, Git, Intellij IDEA, Eclipse)

- Web-development **I'mScientist** (REST, Ruby on Rails, PostgreSQL, MongoDB, Solr, Javascript, jQuery, Git, Vim and Sublime Text)

Corning Inc., Saint-Petersburg, RF

Engineer   **September 2010 to January 2012**

- C++11 development (Implementation of CFD solvers for chemically-reacting gas flow in porous media using OpenFOAM)

- Designing catalytic convertors and diesel particle filters

- Numerical simulation in ANSYS Fluent and ANSYS CFX

TWELL Company, Saint-Petersburg, RF

Engineer   **September 2009 to December 2010**

- Theoretical research and numerical simulation of pneumatic breakwaters and interaction between sea waves and bubble plumes

- Development of a physical model applicable for pneumatic breakwaters

Application Areas

Software Development: Java, C#, C++ (OpenFOAM), Ruby on Rails
Applied Mathematics and Physics: Aerodynamics, Plasma physics, Structural Analysis

Professional Skills

- **Programming Languages**: Java, C#, Ruby, C++, Javascript
- **Frameworks, libraries and tools**: Java Concurrency, J2EE, Spring MVC, Spring TX, and Spring ..., .NET, Hibernate, JMS, NMS, ActiveMQ, JMX, Batis, Maven, Nuget, Ant, JUnit, NUnit, Backbone.js, Ruby on Rails
- **DBMS**: PostgreSQL, Riak
- **IDE**: In love with Intellij IDEA but also familiar with Visual Studio with ReSharper and several editors such as Vim, TextMate and Sublime Text
- **VCS**: Git, Mercurial, Subversion
- **CFD**: SU2, OpenFOAM, ANSYS CFX, ANSYS Fluent, ANSYS Workbench, ANSYS Mechanical, ICEM, Gambit, Salome, CHEMKIN
- **OS**: Mac, Linux(CentOS, Ubuntu, Fedora), Windows