

## Personal information

Surname(s) / First name(s)

Address(es)

Telephone(s)

Email(s)

Nationality(-ies)

Date of birth

Gender

Shafeyev, Roman

18/2 f.345 European avenue, Kudrovo, Leningrad region, Russia

Mobile: +7 965 078 43 30 Skype ID: roma.shafeyev

roman.shafeyev@gmail.com

Russian

Feb 14 1990

male

## Work experience

Date

June 2017 -Now

Occupation or position held

Date

July 2015 - June 2017

Occupation or position held

Date

September 2012 - June 2015

Occupation or position held

Researcher of the Department of Computer Mathematics and Mathematical Modeling, NTU "KhPI", Ukraine

Insurance Telematics Project Manager, StarLine, Saint-Petersburg, Russia

Date

July 2011 - February 2012

Occupation or position held

Researcher of Hamburg University of Technology-TUHH", Germany

C++/Python Server Developer, StarLine, Saint-Petersburg, Russia

## **Education and training**

Place and Date

Specialty

Title of qualification awarded

Title of qualification awarded

Thesis theme

National Technical University "Kharkov Polytechnic Institute", Ukraine, 2013 – 2016

passed PhD minimum, successful completion of postgraduate study

Development of mathematical models and methods to solve the Dynamic Vehicle

Routing Problem with uncertain input parameters

Mathematical modeling and computational methods

Place and Date

National Technical University "Kharkov Polytechnic Institute", Ukraine

Computer Mathematics and Mathematical Modeling department, 2011 – 2013

Master's degree in Applied Mathematics with excellence

Place and Date

National Technical University "Kharkov Polytechnic Institute", Ukraine

Computer Mathematics and Mathematical Modeling department, 2007 – 2011

Bachelor's degree in Applied Mathematics with excellence

Principal subjects covered Mathematical Analysis

Title of qualification awarded

Discrete Mathematics

Programming (C,C++)

Probability Theory and Mathematical Statistics

Object Oriented Programming

Numerical Methods

Optimization Methods

Logical Algorithms and Artificial Intelligence Systems

**Control Theory** 

Development of Information Systems (Java, IDEF, Web 2.0)

Computer Simulation

Distributed Information Systems(Oracle)

**Actuarial Mathematics** 

# Personal skills and competences

Mother tongue(s)
Other language(s)
Self-assessment
European level(\*)

## **English**

# Computer skills and competences

## Russian

#### **English**

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
B1 Independent user	C1 Proficient user	B2 Independent user	B2 Independent user	B2 Independent user

<sup>(\*)</sup> Common European Framework of Reference (CEF) level

## **Operating System Experiences**

- Linux (Debian, Ubuntu /Ubuntu Server), MS Windows

## **Programming Languages**

- C/C++, Java, Python(Tornado, scripts), C#, Ruby(basic level), SQL, PL/pgSQL

### Web-based technologies

- HTML, JavaScript, EmberJS, ASP.NET MVC, Spring MVC, JSP/FreeMarker, Hibernate, Ruby on Rails 4, Tornado

## Continuous integration tools

- Maven, Jenkins CI, Gitlab CI, Capistrano, Ansible

#### **Development tools**

 Intellij Idea, Eclipse, RubyMine, PyCharm, CLion, QT Creator, MS Visual Studio 2012

#### **Database Management Systems**

- PostgreSQL, Oracle, Redis, MySQL

## **Version Control Systems**

- Git, SVN

#### Other skills

- MicroServices: Event-driven architecture(RabbitMQ impl)

- Mathematics: MatLab, Mathcad, R Studio

- Simulation: Rational Rose, GPSSW, Anylogic

- Graphics: OpenGL(+shaders)

## **Additional information**

**GRANTS** 

Grant of Government of Ukraine, 2010-2011.

Grant of the "DAAD-East European Partnership Exchange" funding framework between "National Technical University" (Kharkov, Ukraine) and "Hamburg University of Technology-TUHH" (Germany). During the internship, I worked as a team member, which developed Supply Chain Management project, Hamburg (Germany), July – October 2011.

SOURCE CODE

Source code, demonstration video and documentation of my projects:

Page 2 / 5 - Curriculum vitæ of Shafeyev Roman

For more information call me

#### https://bitbucket.org/Roman\_Shafeyev/projects-view

#### PROJECT EXPERIENCE

#### **Insurance Telematics**

(July 2016 - Now)

Used technologies and tools

- Basic: C++, POCO, CMake, STL, RMQ, Redis, MySQL, Oracle, Python, Tornado, SqlAlchemy

Description

StarLine Insurance Telematics Project is consists of two parts: The Development of WebAPI tools for intagration with Telematics Providers and Insurance Partners; The Development of Software Solutions for cross-server Retransmission Telematics Data in real time mode.

#### PROJECT EXPERIENCE

#### SLNET - TCP/IP Server for interaction with telematics devices.

(July 2015 – Now)

Used technologies and tools

- Basic: C++, POCO, CMake, STL, libevent, RMQ, Redis, MySQL, Oracle Description

SLNET (StraLine Network) is a Asynchronous Nonblocking IO tcp/ip server for interaction with telematics devices.

## OptSDK – Java-based framework for evolutionary computation.

(September 2014 – June 2015)

Used technologies and tools

- Basic: Java, Intellij Idea

Description

The goal of OptSDK is to simplify the evolutionary optimization of user-defined problems as well as the implementation of arbitrary metaheuristic optimization algorithms.

## JLogistics – Vehicle Routing software framework (December 2013 – Now)

Used technologies and tools

- Basic: Java, Intellij Idea

- Web: Spring MVC, JSP/FreeMarker

Description

JLogistics is a vehicle routing software framework for Java that uses specialized metaheuristic algorithms to calculate an optimal solution of the different classes of the static and dynamic vehicle routing problems.

## An application for computing the optimal productive supply of the power transformers in Dushanbe (Tajikistan).(September 2012 – March 2013)

Used technologies and tools

- Basic: Matlab

Description

The developed application allows to find the best productive supply for each transformer with minimal losses on the transformers.

## Supply Chain Building Blocks (July 2011 – February 2012)

Used technologies and tools

- Basic: Java, Anylogic 6.6
- Routes building for transport agents: C++, WinAPI/MFC, Visual Studio 2008, OSM
- Database: Microsoft Excel (with macros), Microsoft Access

Description

The modeling platform follows a rigorous development process framework, where model validity is ensured by using Supply Chain Operations Reference as theoretical process framework. An agent based simulation platform is presented for generic supply chain modeling adding flexibility and configurability over existing models.

## Numerical simulation of the motion of celestial bodies (October 2009–July 2010)

Used technologies and tools

Basic: C++, WinAPI/MFC, Visual Studio 2008
Database: MS SQL Server 2008 Express

- Graphics: OpenGL

## Description

The scientific software is for the numerical decision of the research problem of celestial bodies movement processes, visualization in three-dimensional space of modeling process, as well as processing, ordering and classification of the received orbital data. The main project objective was to define potentially dangerous for the Earth asteroids from the Aton's group and create the catalog of orbital evolution for them on a time interval from 2009 to 2200.

## Navigation GIS (October 2009 – July 2010)

Used technologies and tools

- Basic: C++, WinAPI/MFC, Visual Studio 2008

Database: PostgreSQLNetwork: TCP/IP sockets

- Render map: OpenStreetMap, Google Maps API

Description

The client-server system was used for vehicle movement monitoring in real time (Student project).

## Terrain Generator (September 2008 – January 2009)

Used technologies and tools

- Basic: C++, WinAPI/MFC, Visual Studio 2008

- Graphics: OpenGL, shaders

Description

This application is the generator of three-dimensional landscapes (Student project).

## **PUBLICATIONS**

- R. Shafeyev. Investigation of tuning parameters of Tabu Search algorithm and its modification for solving the static Routing Courier Delivery Problem. // Theoretical and Applied Aspects of Cybernetics. 2018 (not yet published).
- R. Shafeyev. A new metaheuristic algorithm for Solving the Transportation Problem with Time Constraints / L. Lyubchik // Vestnik NTU "KhPI". Kharkov: NTU "KhPI", 2013. No3 (977). p. 35–39.
- R. Shafeyev. Relationship between the Vehicle Routing Problem with Time Windows and the Assignment Problem. // Theoretical and Applied Aspects of Cybernetics. Kiev: Bukrek, 2012. p.145–149.

#### SCIENTIFIC WORK

- May 2013, I presented the research work, devoted of development of clientserver information system for solving the Dynamic Vehicle Routing Problem at the XV International Conference on Science and Technology "System Analysis and Information Technologies" at the National Technical University "KPI", Kiev, Ukraine.
- March 2012, The winner (1'st place) of the all-Ukrainian competition of the research student works, section "Informatics and Cybernetics", Vinnytsia, Ukraine.
- September 2011, participant of the International Conference of Logistics at the Hamburg University of Technology, Hamburg, Germany.
- October 2010, I presented the research work, devoted to effects of electromagnetic fields on the complex biological objects at the Vth International conference "Environmental aspects of the technological security of the regions" at the National Automobile and Road University, Kharkov, Ukraine.
- May 2010, I presented the research work, devoted to numerical simulation of the motion of celestial bodies at the XII International Conference on Science and Technology "System Analysis and Information Technologies" at the National Technical University "KPI", Kiev, Ukraine.
- May 2007, The winner (2nd place) of the third stage of the all-Ukrainian competition of research carried out by the students-members of the Ukrainian Small Academy of Sciences, section "Computer networks, databases and data banks", Kiev, Ukraine.
- December 2006, The winner (1nd place) of the second stage of the all-Ukrainian competition of research carried out by the students-members of the Ukrainian Small Academy of Sciences, section "Computer networks, databases and data banks", Zaporozhye, Ukraine.