# **ALEXANDER MURASHKIN**

Project Demos: <a href="https://www.student.cs.uwaterloo.ca/~amurashk/">www.student.cs.uwaterloo.ca/~amurashk/</a>

E-mail: <u>amurashk@gsd.uwaterloo.ca</u>

Phone: +1 (226) 600-5529 Address: #4-354 Erb St W,

Waterloo, ON, Canada

## **Professional Knowledge and Skills**

| Client-server architecture and website development skills  | Javascript, AJAX, JQuery, Node.JS, Angular.JS, D3.js, PHP, SQL, Drupal CMF, HTML, CSS, Zend Framework |
|--|---|
| Desktop/standalone application development   | Java, Maven, Microsoft Visual C#, WPF, Delphi   |
| Operating system design, real-time and embedded programming  | C language, micro-kernel design, Märklin Digital Interface, ARM and Intel assembly languages          |
| Mobile application development skills  | Android Platform, Windows Phone 7, SQLite   |
| Game development and computer graphics  OpenGL, GLUT, algorithms, data structures, Physics and Math skills, computational geometry |   |
| Domain, feature and architectural modeling   | UML, SysML, AADL, Clafer language   |

### **Higher Education**

| 2012 – Aug.2014 | MMath in Computer Science, University of Waterloo,  |
|-----------------|---|
| (expected)      | Waterloo, ON, Canada. Average: 93 / 100   |
| 2008 – 2012     | <b>BSc</b> in Computer Systems and Software, Kazakh-British Technical University, Almaty, Republic of Kazakhstan. Average: 3.97 / 4.00. |

### **Employment History**

| Sept 2012 – present<br>University of Waterloo            | <ul> <li>Graduate Research Assistant / Teaching Assistant</li> <li>Designed and implemented Web-based tools for compiling, configuring and optimizing variability models (Node.JS, Javascript):         <ul> <li>http://t3-necsis.cs.uwaterloo.ca:8094/</li> <li>http://t3-necsis.cs.uwaterloo.ca:8093/</li> <li>http://t3-necsis.cs.uwaterloo.ca:8092/</li> </ul> </li> <li>Currently exploring modeling case studies (Clafer language):         <ul> <li>Modeling system architectures with variability</li> <ul> <li>Multi-objective optimization and visualization of optimal instances and trade-offs of decision-making</li> </ul> </ul></li> <li>Part of NECSIS project (<a href="http://gsd.uwaterloo.ca/necsis">http://gsd.uwaterloo.ca/necsis</a>)</li> </ul> |  |
|--|---|--|
| Oct 2013 – Dec 2013<br>Pratt & Whitney Canada            | Intern      Worked on system and software modeling     Exploratory work on optimization of general company's work flow  |  |
| June 2011 – Dec 2011 Kazakh-British Technical University | <ul> <li>Senior Specialist</li> <li>Developed International School of Economics and Social Sciences website (Drupal CMS, PHP, Javascript, HTML)</li> <li>Created few modules of the university website (Drupal CMS)</li> <li>Developed an online document processing system (Drupal CMS)</li> <li>Created an online file sharing system (Zend Framework)</li> </ul>   |  |

#### **Conferences and Events Attended**

| 1. 17th International Software Product Line Conference 2013, Tokyo, Japan | as a paper author                            |
|---|--|
| 2. Summer School on Cyber-Physical Systems 2013, Grenoble, France         | as a participant                             |
| 3. Microsoft Imagine Cup 2012, World Finals, Sydney, Australia            | as a competition participant                 |
| 4. Google Developer Day 2011, Moscow, Russia                              | as a winner of a local<br>Hackathone by GTUG |

#### **Publications**

<u>Murashkin, A.</u>, M. Antkiewicz, D. Rayside, and K. Czarnecki, "Visualization and Exploration of Optimal Variants in Product Line Engineering", Software Product Line Conference, Tokyo, Japan, 2013

Antkiewicz, M., K. Bąk, <u>A. Murashkin</u>, R. Olaechea, J. Liang, and K. Czarnecki, "Clafer Tools for Product Line Engineering", Software Product Line Conference, Tokyo, Japan, 2013.

#### **Achievements and Awards**

| 2012 | Microsoft Imagine Cup 2012, local finals – 1 <sup>st</sup> place "Red Diploma" - a diploma with Honours – for perfect academic achievements   |
|------|---|
| 2011 | Android Hackathone competition, Almaty Google Technical User Group, 1 <sup>st</sup> place Microsoft Imagine Cup, local final, 2 <sup>nd</sup> place International Student Competitions of IT Projects, Kazakh-British Technical University, "Multimedia technologies and Game Development" nomination – 1 <sup>st</sup> degree diploma, "Web Applications and Database Design" nomination – grand prize |
| 2010 | International Competitions of IT Projects, Kazakh-British Technical University, 3 <sup>rd</sup> degree diploma The scholarship named after the President N.Nazarbayev for perfect academic achievements   |
| 2009 | IT Project Competitions, Kazakh-British Technical University, 2 <sup>nd</sup> degree diploma  |
| 2008 | Intel Excellence in Computer Science Award for the project "Paper-based test generating computer application"  State Education Grant (scholarship) and Golden Medal for perfect academic results "Daryn" Junior Science Competition, Computer Science section, 1st degree diploma Scientific project competition, the Small Academy of Sciences, 1st degree diploma                                     |

### Languages

English: fluent, Russian: native, Kazakh: intermediate, German and French: beginner

#### Interests (besides programming):

Board games, Chess, Bicycling, Physics, Science.