DMITRY PYRYESKIN

(647) 886-3523 ● dmitry@pyryeskin.com ● dmitry.pyryeskin.com

Education

MMath in Computer Science
University of Waterloo
Sept 2010 – Oct 2012

B.Sc. with Honours in Computer Science
Ryerson University
Sept 2003 – May 2008

Employment

Senior Software Developer (contract)
Techna Research Institute
Feb 2013 – Present

Research Assistant (Software Developer)
University of Waterloo
Nov 2012 –Jan 2013

Software Developer
IBM Toronto Lab
June 2008 – Feb 2011
May 2006 – Sept 2007

Web Application Developer
Devlin
May 2005 – Sept 2005

Certification

IBM Certified Application Developer
Rational Application Developer V6.0
August 2007

Certified for IBM Rational software

Qualifications Summary

- Over 5 years of work experience in software and web development
- Well versed in a variety of programming languages, frameworks and IDEs
- Passion for knowledge and learning
- Enthusiastic about solving complex problems
- Innovative out-of-the-box thinking
- Able to work independently with minimal supervision

Technology Summary

Languages:	Java/J2EE, C/C++, ActionScript, LotusScript, Basic, REXX
Web development:	GWT, JavaScript, AJAX, REST, HTML/HTML5, CSS, XML, JSON, PHP, JSP, ASP
Servers:	Apache Tomcat, Node.js, WebSphere, IIS
Databases:	MS SQL Server, MySQL, DB2, MongoDB, EJB, Hibernate
IDEs:	Eclipse, NetBeans, IBM Rational Application Developer, Microsoft Visual Studio, Adobe Flex, Adobe Dreamweaver
Frameworks:	Processing, openFrameworks, OpenCV, jQuery, Bootstrap, Struts, Spring, Wordpress
Source control:	Git, Subversion, CVS, IBM ClearCase

Research Projects

Master's Thesis (University of Waterloo, Oct 2012)

Title: Interaction in the space above a multitouch surface

Supervisors: Jesse Hoey and Mark Hancock

The purpose of this research was to study new ways of interacting with a computer in the space above the surface of a multitouch table. The study involved modifying the hardware of a custom-built multitouch screen, developing computer vision algorithms for tracking a person's hand and fingers on and above its surface, developing an experimental user interface. It also included two studies, in which participants were asked to perform various actions with interface elements, such as navigating menus and selecting buttons.
Technologies used: Java, C++, Processing framework, OpenCV, openFrameworks.

Undergraduate Thesis (Ryerson University, May 2008)

Title: Mobile Autonomous Robot Simulation (MARS) Framework

Supervisor: Alexander Ferworn

The purpose of this research project was to develop a framework for simulation of autonomous mobile robots. The resulting framework provides a free, fast, easy and flexible way to simulate a small autonomous mobile robot moving on the surface of a table. A built-in physics engine simulates the robot's interactions with the environment and other objects on the table.
Technologies used: ActionScript, Adobe Flex.

Work Experience

Feb 2013 – Present **Senior Software Developer (1-year contract)**
Techna Research Institute, University Health Network, Toronto

- Developed an experimental web-based application using Google Web Toolkit (GWT) that allows clinicians and researchers to view CT and MRI scans in a web browser as well as to contour and measure detected tumours. The measurements of tumours are then processed to calculate a RECIST score, which is used for clinical and research purposes. This project is a part of Personalized Cancer Medicine initiative.
- Developed a mobile application that integrates critical information for clinicians and researchers treating cancer patients and doing research into cancer. The front end of the application is based on Codename One framework to allow deploying to iOS-based and Android-based devices. The back end server uses Spring framework to implement a RESTful service.
- Developed the functionality for a WordPress-based website that allows project leads at University Health Network to publish and track progress of various strategic initiatives.

Technologies used: Java, GWT, HTML, CSS, Hibernate, Apache Tomcat, SQL, PHP, WordPress, Codename One, Spring, REST.

Nov 2012 – Jan 2013 **Graduate Research Assistant (Software Developer)**
University of Waterloo, Waterloo

- Developed a multitouch application for the graduate adviser's research project, which is aimed at developing a computerized touch-screen tool for art therapists working with Alzheimer's patients. The software allows therapists to design individualized computer applications for particular clients. The resulting applications look like painting programs, but are usually simpler, can follow the therapeutic goals of the therapist designer, and can be adapted to particular user's needs, taking into account visual, auditory and motor capabilities.

Technologies used: Java, C++, Processing framework, OpenCV, openFrameworks.

June 2008 – Feb 2011 **Software Developer**
IBM Toronto Lab, Markham

- Developed and managed an internal web-based application used for storage and management of resources related to Character Data Representation Architecture (CDRA):
  - Assumed the responsibility for completing the development cycle, including defect tracking and resolution, deployment and disaster recovery planning
  - Created and organised high-level documentation for the project
- Researched and wrote articles for Globalization Implementation Guide (IBM's internal repository of globalization techniques for developers)
- Developed a Wiki for the Globalization Education classes

Technologies used: J2EE, Struts, EJB, WebSphere, DB2.

May 2006 – Sept 2007 **Software Developer (internship student)**
IBM Toronto Lab, Markham

- Developed an internal web-based application used for storage and management of resources related to Character Data Representation Architecture (CDRA):
  - Front-end to back-end development involvement
  - Performed the Unit and Function Testing; designed test scenarios for the User Acceptance Testing
  - Translated and integrated the legacy C and REXX code into the Java framework
- Maintained and enhanced Lotus Notes databases

Technologies used: J2EE, Struts, EJB, WebSphere, DB2, C, REXX.

May 2005 – Sept 2005 **Web Application Developer (internship student)**
Devlin eBusiness Architects Inc., Toronto

- Developed web applications end-to-end: from presentation layer to back-end logic
- Prepared and executed test plans for Unit and Integration Testing, supported User Acceptance Testing
- Worked with Quality Assurance team and customers to resolve problems

Technologies used: HTML, CSS, ASP, PHP.