

Olga Irzak

EDUCATION

Masters student in the Systems group under the supervision of Eyal de Lara, University of Toronto, Sept. 2008 - present

- Currently focusing on distributed caching of large datasets in the context of the Snowflock project
- TA for 3rd year OS course - teaching tutorials, office hours & marking, Sept. 2008 - present.
- Helen Sawyer Hogg graduate admission award

Bachelor of Mathematics Honours Computer Science Major with combinatorics & Optimization minor Co-op, University of Waterloo, Waterloo, Ontario, Sept 2002 to Dec. 2007

- Graduated with distinction
- Rene Descartes Scholarship, J.R. Coutts International Experience Award
- Teaching assistant for linear algebra - Winter Semester 2004 & 2005

Exchange student at Ecole Polytechnique Federale de Lausanne (EPFL), Switzerland, Oct. 2006 to Feb. 2007. Research Assistant Mar. to Apr. 2007.

Exchange student at Lunds Universitet, Lund, Sweden, Sept. to Dec. 2004

WORK EXPERIENCE

PARC, Palo Alto April 2008 - July 2008

- Participated in the development of a distributed documents system.
- Contributed to an intelligent search module which is activity and version aware.

Ecole Polytechnique Federale de Lausanne (EPFL), Switzerland March 2007 - July 2007

- Worked on a prototype for a project regarding "Loss and Delay Accountability for the Internet" using CLICK open source router.
- Theoretical aspect: analyzed the possible security risks of the design.
- Presented the project in a poster session at EPFL
- Project has appeared in ICNP (International Conference on Network Protocols), 2007: "[Loss and Delay Accountability for the Internet](#)" by K. Argyraki (EPFL, Switzerland), P. Maniatis (Intel Research, USA), O. Irzak, S. Ashish (EPFL, Switzerland), S. Shenker (UC Berkeley, USA)

Microsoft, Redmond May 2006 - August 2006

- Developed a command line tool for the harddrive encryption team (in C and COM) using Windows Vista API. The tool's purpose is to repartition a given harddisk appropriately, switch the active volume and migrate the BCD hive if needed in a safe manner.
- Presented the project to the security team

Business Objects, Vancouver May 2005 - Dec. 2005

- Added functionality to applications using C++, COM, Java
- Developed web application functionality using JSF, JavaBeans, CSS, XML, Javascript, .NET
- Worked on internationalized applications supported on multiple platforms

Research in Motion, Ottawa

April 2004 - August 2004

- Embedded programming / debugging in C as a small part of a project porting the RIM's OS & applications to run on a client's OS
- Programming and debugging applications in Java
- Interacting with customers to gather information for requirement documents
- Product testing

Volunteer

Campus representative for the Department of Computer Science at the University of Toronto

Sept. 2008 - present

Student organizer of new graduate visit day for the Systems lab for the University of Toronto

February 2009

Volunteer global representative for the University of Waterloo

Jan. 2004 - April 2006

COMPUTER PROJECTS

Systems:

- C - implemented an RTOS from scratch and wrote an application running on the OS to manage a train with unreliable sensors (about 85% accuracy)
- C++ - added functionality to an operating system
- Java with JLex and CUP - compiler for a procedural language into MIPS

Graphics:

- C++ - wrote a ray tracer engine with multiple light sources, reflections, shadows and bounding volumes
- OpenGL with C++ - implemented a 3D view killer snowman game, a tetris game, designed and animated a puppet
- TCL/TK & gtkmm - created a drawing program and used it for various GUI implementations

Applications:

- Java - implemented a synchronized surveillance system over a network
- SQL, JDBC, swing, Java servlet and Oracle - created a movie booking system and simulation for product tracking system in a factory
- C++ - implemented a bidirectional text parser and formatter
- JavaScript with DHTML and CSS - implemented a web game based on Arachnoid.

PUBLICATIONS

- "[Loss and Delay Accountability for the Internet](#)" by K. Argyraki (EPFL, Switzerland), P. Maniatis (Intel Research, USA), O. Irzak, S. Ashish (EPFL, Switzerland), S. Shenker (UC Berkeley, USA)

INTERESTS

- An avid traveler and an aspiring polyglot
- Gymnastics, swimming, snowboarding, recently discovered kiteboarding
- Cell biology