# KEVIN JALBERT

Toronto, Ontario, Canada

### KEVINJALBERT.COM

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Sep. 2010 - Sep. 2012

### KEY POINTS

- Excellent academic record with numerous honors and awards.
- Strong technical writing and presentation skills including the ability to be concise and communicate to technical and non-technical audiences.
- Willingness to develop, improve and optimize products and services.
- Dedication to Software Engineering demonstrated through open source and community involvement.

## Programming Languages

Bash, C#, Java, Python, Ruby

# SOFTWARE SKILLS

Software Engineering Design, UML, Concurrency, Software Quality and Testing, Linux, Git, Machine Learning, Data Mining, Mutation Testing

### EDUCATION

University of Ontario Institute of Technology (UOIT) Oshawa, Ontario, Canada Master of Science in Computer Science

Cumulative GPA of 4.18 / 4.30.

UOIT Oshawa, Ontario, Canada Bachelor of Software Engineering Sep. 2006 – Apr. 2010 Cumulative GPA of 3.44 / 4.30.

### Work Experience

Fixmo Inc. Toronto, Ontario, Canada Nov. 2012 - Present Software Engineer

- Implemented new features in Fixmo Sentinel using Vaadin and MySQL.
- Conceived and led developmental efforts for an automated UI testing framework using Selenium.

### Research Experience

Graduate Research Assistant, UOIT Oshawa, Ontario, Canada Aug. 2010 - Sep. 2012 Software Quality Research Lab

Worked on research projects related to concurrency, static and dynamic analysis, software metrics, testing, and machine learning.

Undergraduate Research Assistant, UOIT Oshawa, Ontario, Canada

Software Quality Research Lab May 2010 - Aug. 2010

Developed a new approach to automatically fix Java concurrency bugs using genetic algorithms.

Oshawa, Ontario, Canada Undergraduate Research Assistant, UOIT Software Quality Research Lab May 2009 - Aug. 2009

Developed an optimized approach to regression testing of concurrent Java programs using code analysis and information about previously detected bugs.

# PROFESSIONAL DEVELOPMENT

- Assisted with reviewing papers for three international conferences/workshops:
  - International Conference on Computer Science and Software Engineering (CASCON 2012).
  - International Workshop on Mutation Analysis (Mutation 2012).
  - Symposium on Search Based Software Engineering (SSBSE 2011).
- Organized a poster session at the 2011 Fall Meeting of the Consortium for Software Engineering Research (CSER).
- Organized tutorials on topics including unit testing, version control with *Git* for UOIT undergraduate and graduate students.
- Contributed to open source software on GitHub

# CERTIFICATIONS

**UOIT** – Teaching Certificate

2012

# HONORS AND AWARDS

External Ontario Graduate Scholarship, UOIT Scholarship for graduate studies in Ontario (Declined).

2012 - 2013

External Ontario Graduate Scholarship, UOIT Scholarship for graduate studies in Ontario.

2011 - 2012

Dean's Graduate Scholarship – Master's Level, UOIT

2010 - 2012

Scholarship for graduate studies at UOIT. Requires a minimum 3.7 GPA.

Institutional Ontario Graduate Scholarship, UOIT

2010 - 2011

Scholarship for graduate studies at UOIT.

Funding for undergraduate research at UOIT.

2009 - 2010

President's List, UOIT

2008 - 2010

For attaining a semester GPA of at least 3.80/4.30 (undergraduate).

NSERC – Undergraduate Student Research Award, UOIT

# Teaching Experience

Teaching Assistant, UOIT

Software Quality - CSCI 3060U/ENGR 3980U

Oshawa, Ontario, Canada Jan. 2012 – Apr. 2012

Introduced and demonstrated various concepts on agile development and testing for software systems (*Two Sections*).

Teaching Assistant, UOIT

Introduction to Computer Science - CSCI 1030U

Oshawa, Ontario, Canada

Sep. 2011 – Dec. 2011

Introduced the basic concepts of computer science as well as an introduction to computer programming (Two Sections).

Teaching Assistant, UOIT

Programming Workshop - CSCI 2030U

Oshawa, Ontario, Canada Jan. 2011 – Apr. 2011

Introduced modern concepts in program design along with features of object oriented programming languages (Two Sections).

Teaching Assistant, UOIT

Principles of Computer Science - CSCI 2010U

Oshawa, Ontario, Canada Sep. 2010 – Dec. 2010

Introduced students to general computer programming principles and the analysis of algorithms and data structures (One Section).

#### Teaching Assistant, UOIT

Software Engineering I: Requirements, Design and Analysis – CSCI 3040U Introduced students to the stages software development life cycles and software design with UML (One Section).

Oshawa, Ontario, Canada Sep. 2010 – Dec. 2010

# **PUBLICATIONS**

- D. Kelk, K. Jalbert and J.S. Bradbury. "Automatically Repairing Concurrency Bug With ARC", In Proc. of the 1st International Conference on Multicore Software Engineering, Performance, and Tools (MUSEPAT 2013), pages 12, Saint Petersburg, Russia, Aug. 2013.
- J.S. Bradbury, I. Segall, R. Farchi, K. Jalbert and D. Kelk. "Using Combinatorial Benchmark Construction to Improve the Assessment of Concurrency Bug Detection Tools", In Proc. of the 10th Workshop on Parallel and Distributed Systems: Testing, Analysis, and Debugging (PADTAD 2012), pages 25–35, Minneapolis, Minnesota, Jul. 2012.
- K. Jalbert and J.S. Bradbury. "Predicting Mutation Score Using Source Code and Test Suite Metrics", In Proc. of the Workshop on Realizing Artificial Intelligence Synergies in Software Engineering (RAISE 2012), pages 5, Zurich, Switzerland, Jun. 2012. Best Paper Award.
- J.S. Bradbury and K. Jalbert. <u>"Automatic Repair of Concurrency Bugs"</u>, In Proc. of the 2nd International Symposium on Search Based Software Engineering (SSBSE 2010) Fast Abstracts, pages 2, Benevento, Italy, Sep. 2010.
- K. Jalbert and J.S. Bradbury. "Using Clone Detection to Identify Bugs in Concurrent Software", In Proc. of 26th IEEE International Conference on Software Maintenance (ICSM 2010), pages 5, Timisoara, Romania, Sep. 2010.
- J.S. Bradbury and K. Jalbert. "Defining a Catalog of Programming Anti-Patterns for Concurrent Java", In Proc. of the 3rd International Workshop on Software Patterns and Quality (SPAQu'09), pages 6–11, Orlando, Florida, USA, Nov. 2009.

### Posters

- K. Jalbert, C. LeBlanc, C. Forbes, R. Liscano and J.S. Bradbury. "Eclipticon: Eclipse Plugin for Concurrency Testing", In 2011 Fall Meeting of the Consortium for Software Engineering Research (CSER), Markham, Ontario, Canada, Nov. 2011. Best Poster Award.
- K. Jalbert and J.S. Bradbury. "Predicting Difficulty of Detecting Bugs using Source Code Metrics", In 2011 Summer Meeting of the Consortium for Software Engineering Research (CSER), Kingston, Ontario, Canada, Jun. 2011.
- K. Jalbert and J.S. Bradbury. "A Tool for Automatically Repairing Concurrency Bugs", In Technology Showcase at the International Conference on Computer Science and Software Engineering (CASCON 2010) & the 2010 Fall Meeting of the Consortium for Software Engineering Research (CSER), Markham, Ontario, Canada, Nov. 2010.
- K. Jalbert and J.S. Bradbury. "Using Clone Detection to Identify Bugs in Concurrent Software", In Proc. of 26th IEEE International Conference on Software Maintenance (ICSM 2010), Timişoara, Romania, Jun. 2010.
- K. Jalbert and J.S. Bradbury. "Using Bug Patterns in the Regression Testing of Concurrent Software", In Technology Showcase at the International Conference on Computer Science and Software Engineering (CASCON 2009) & the 2009 Fall Meeting of the Consortium for Software Engineering Research (CSER), Markham, Ontario, Canada, Nov. 2009.