Michael A. Miljanovic – CURRICULUM VITAE

Doctoral Student, Computer Science, Faculty of Science University of Ontario Institute of Technology (UOIT) 2000 Simcoe St. N., Oshawa, ON, Canada

michael.miljanovic@uoit.net • http://www.sqrlab.ca/miljanovic/

Research Interests

Serious games, computer education, game-based learning, user studies, human-computer interaction, software engineering education, artificial intelligence, empirical software engineering, gamification.

Education

PhD Computer Science (In Progress), 2015-2019

UOIT, Oshawa, ON, Canada Supervisor: Dr. Jeremy Bradbury

MSc Computer Science, 2015 UOIT, Oshawa, ON, Canada Supervisor: Dr. Jeremy Bradbury

Dissertation Title: RoboBUG: A Game-Based Approach to Learning

Debugging Techniques

BSc Honours Computer Science & Mathematics, 2012

University of Toronto, Toronto, ON, Canada

Scholarships & Academic

- Queen Elizabeth II Graduate Scholarship in Science and Technology (QUII-GSST), 2017-2018, 2018-2019
- Achievements Finalist, Three Minute Thesis Competition, UOIT, 2017
 - Dean's Graduate Scholarship, UOIT, 2015-2016
 - Governor General's Bronze Medal, Eastdale Collegiate and Vocational Institute, 2008

Refereed Conference & Workshop Publications

Michael A. Miljanovic, Jeremy S. Bradbury. "A Review of Serious Games for Programming," *Proc. of the 4th Joint Conference on Serious Games (JCSG 2018)*, Darmstadt, Germany, Nov. 7-8, 2018, 12 pp.

Michael A. Miljanovic, Jeremy S. Bradbury. "Making Serious Programming Games Adaptive," *Proc. of the 4th Joint Conference on Serious Games (JCSG 2018),* Darmstadt, Germany, Nov. 7-8, 2018, 6 pp.

<u>Michael A. Miljanovic</u>, Jeremy S. Bradbury. "RoboBUG: A Serious Game for Learning Debugging Techniques," *Proc. of the ACM International Computing Education Research Conference (ICER 2017),* Tacoma, WA, USA, August 2017.

<u>Michael A. Miljanovic</u>, Jeremy S. Bradbury. "Robot ON!: A Serious Game for Improving Programming Comprehension," *Proc. of the 5th*

International Workshop on Games and Software Engineering (GAS 2016), Austin, TX, USA, May 2016.

Posters & Exhibits

Luisa Rojas Garcia, Michael A. Miljanovic, Jeremy S. Bradbury. "Threaded Paws: A Serious Game for Learning the Pitfalls of Concurrent Programming", In Technology Showcase at the 27th Annual International Conference on Computer Science and Software Engineering (CASCON 2017), Markham, ON, Canada, Nov. 2017.

<u>Michael A. Miljanovic</u>, Scott McLean, Jeremy S. Bradbury. "Robot ON!: A Serious Game for Program Comprehension", In Technology Showcase at the *26th Annual International Conference on Computer Science and Software Engineering (CASCON 2016)*, Markham, ON, Canada, Oct. 2016.

<u>Michael Miljanovic</u>, Jeremy S. Bradbury. "RoboBUG: Learning Debugging with Games", In Technology Showcase at the *24th Annual International Conference on Computer Science and Software Engineering (CASCON 2014)*, Markham, ON, Canada, Nov. 2014.

Contributed Presentations

- "RoboBUG: A Game-Based Approach to Learning Debugging Techniques," *ICER 2017*, Tacoma, WA, USA, Aug. 2017.
- "Adaptive Serious Games for Computer Science Education," UOIT Graduate Student Conference, Oshawa, ON, Canada, Apr. 2017.
- "Adaptive Serious Games for Computer Science Education," Three Minute Thesis Competition, UOIT, Oshawa, ON, Canada, Mar. 2017.
- "Robot ON!: A Serious Game for Program Comprehension," In Technology Showcase at the CASCON 2016, Markham, ON, Canada, Oct. 2016.
- "Robot ON!: A Serious Game for Improving Programming Comprehension," *GAS 2016*, Austin, TX, USA, May 2016.
- "RoboBUG: A Game-Based Approach to Learning Debugging Techniques," Three Minute Thesis Competition, UOIT, Oshawa, ON, Canada, Apr. 2015.

Teaching Experience

Sessional Instructor – UOIT:

- CSCI 1060U: Programming Workshops, 2017
- CSCI 3060U: Software Quality Assurance, 2018

Teaching Assistant – UOIT:

- CSCI 1030U: Introduction to Computer Science, 2015
- CSCI 1040U: Introduction to Programming for Scientists, 2013-2015
 TA coordinator (2014)
- CSCI 1060U: Programming Workshop I, 2013, 2015-2016
 - TA coordinator (2015), included guest lecturing (2015)
- CSCI 3060U/SOFE 3980U: Software Quality (Assurance), 2016-2017
 included guest lecturing (2016)
- CSCI 3070U: Analysis & Design of Algorithms, 2014
- CSCI 3220U: Digital Media Production, 2014
- CSCI 4160U: Interactive Media, 2014

<u>Teaching Assistant – University of Toronto:</u>

- MATA30: Introductory Calculus, 2012
- CSCA08: Introductory Programming, 2012
- CSCA65: Discrete Math, 2012
- CSCB63: Data Structures and Algorithm Analysis, 2012

Student Co-Supervision

- Damon Barton, Computing Science Honours Thesis Student, Learning Refactoring Using Serious Games (*Project*), 2017-2018
- Luisa Rojas Garcia, Computing Science Honours Thesis Student,
 Learning Concurrency Using Serious Games (Project), 2016-2017
- Scott McLean, Software Engineering Summer Research Student, Enhancing First Year Programming Labs Using Game-Based Learning (Project), 2016

Extra-Curricular Involvement

- President, UOIT Board Games Club, UOIT, 2015-2018
- President, Brainwave Board Game and Trivia Society, University of Toronto (Scarborough Campus), 2011-2012