## Michael A. Miljanovic – CURRICULUM VITAE

Doctoral Candidate, Computer Science, Faculty of Science Ontario Tech University (UOIT)

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## Research Interests

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

#### Education

### PhD Computer Science (In Progress), 2015-Present

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

Dissertation Title: Enhancing Computer Science Education with Adaptive

**Serious Games** 

## **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

## Awards, Scholarships, & Academic Achievements

- Nominee, 2018 UOIT Student Choice Teaching Award
- Scholarships, & Queen Elizabeth II Graduate Scholarship in Science and Technology Academic (QUII-GSST), 2017-2018, 2018-2019
  - 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.

<u>Michael A. Miljanovic,</u> 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.

Michael A. Miljanovic, 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.

Michael A. Miljanovic, 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, <u>Michael A. Miljanovic</u>, 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

- "A Review of Serious Games for Programming," JCSG 2018, Darmstadt, Germany, Nov. 8, 2018
- "Making Serious Programming Games Adaptive," JCSG 2018, Darmstadt, Germany, Nov. 8, 2018
- "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

## <u>Sessional Instructor – UOIT:</u>

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

#### <u>Teaching Assistant – UOIT:</u>

- CSCI 3060U/SOFE 3980U: Software Quality (Assurance), 2016-2017, 2019
  - included guest lecturing (2016, 2019)
- CSCI 4040U: Ethics, Law, and the Societal Impacts of Computing, 2018
- CSCI 1060U: Programming Workshop I, 2013, 2015-2016
   TA coordinator (2015), included guest lecturing (2015)
- CSCI 1040U: Introduction to Programming for Scientists, 2013-2015
   TA coordinator (2014)
- 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, 2017-2018
- Luisa Rojas Garcia, Computing Science Honours Thesis Student, Learning Concurrency Using Serious Games, 2016-2017
- Scott McLean, Software Engineering Summer Research Student, Enhancing First Year Programming Labs Using Game-Based Learning (Teaching Innovation Fund Grant, Investigators: Jeremy Bradbury, Michael Miljanovic), 2016

## Extra-Curricular Involvement

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