Jonathan Tremblay   Curriculum Vitae

CONTACT INFORMATION	Montréal, Québec, Canada. H2V 1Z7 Home: +1-514-419-1457 E-mail: jtremblay@cs.mcgill.ca

EDUCATION

Philosophical Doctorate in Computer Science   2011 - Now
McGill University, Montréal, Québec, Canada
Advisor: Clark Verbrugge
Thesis: Computing Techniques for Game Design Process (provisional)
Expected: Winter 2015

Master's in Computer Science - *Maîtrise en Informatique*   2009 - 2011
Université du Québec à Chicoutimi, Chicoutimi, Québec, Canada
Advisor: Bruno Bouchard
Thesis: A New Approach to Dynamic Difficulty Adjustment in Video Games
Semester Abroad: École Supérieur de Génie   2010
   Informatique (ESGI), Paris, France

Baccalaureate in Video Game Conception - *Bac. en Conception de Jeux Video*   2006 - 2009
Université du Québec à Chicoutimi
Minor: Digital Arts
Semester Abroad: University of Guelph, Guelph, Ontario, Canada   2008

AWARDS

Graduate Excellence Fellowship   2015
PhD at McGill University
Assistance in funding new and continuing Graduate students

Graduate Excellence Fellowship   2014
PhD at McGill University
Assistance in funding new and continuing Graduate students

Best Paper Award at FDG   2013
PhD at McGill University
Award given to the best paper in its category.

Lorne Trottier Science Accelerator Fellowship   2012
PhD at McGill University
Award given to promising graduate students

Computer Science Top-up Award   2012
PhD at McGill University
Funding for student with major scholarship such as FQRNT or NSERC

Graduate Excellence Fellowship   2012
PhD at McGill University
Assistance in funding new and continuing Graduate students

Lorne Trottier Science Accelerator Fellowship   2012
PhD at McGill University
Award given to promising graduate students

Graduate Excellence Fellowship   2011
PhD at McGill University
Award given to promising graduate students

Fonds Québécois de la Recherche sur la Nature et les Technologies (FQRNT) - B2 2011
  PhD at McGill University
  Major scholarship towards completion of doctoral studies

Excellence in Computer Science 2010
  Master's at Université du Québec à Chicoutimi
  Award given to best student in computer science at Master's level

UQAC's Long Term Development 2010
  Master's at Université du Québec à Chicoutimi
  Award given to promising students

PROFESSIONAL
EXPERIENCES

Course Coordinator - COMP 202 2014-2015
  McGill University
  Coordinating course lecturers and teacher assistant
  Developed the course syllabus
  Assuring teaching quality

Course Lecturer 2013-2015
  McGill University
  Taught COMP 202 - Foundations of programming
  Entry level programming, intermediate oriented object concepts and
    introduction to principals of computing to undergraduate students.
  Fall 2013 - 2 sections (400 students, 17 teacher assistants)
  Winter 2014 - 1 section (150 students, 11 teacher assistants)
  Fall 2014 - 1 section (250 students, 21 teacher assistants)
  Winter 2015 - 1 section (120 students, 14 teacher assistants)

Course Lecturer 2010
  Université du Québec à Chicoutimi
  Designed and taught 15 lectures for 8PRO140 - Introduction to visual programming
  Developed online tutorial and teaching material to help students grasp
    programming concepts.
  Taught entry level programming and intermediate oriented object concepts
    to undergraduate students.

Programmer 2007
  CEBFOB - Baie-Comeau, Québec, Canada
  Planned, programmed, designed and tested "Maître des ponceaux ver. 2.0" software

PUBLICATIONS **Conference Paper**

  J. Campbell, J. Tremblay, and C. Verbrugge. Clustering Player Paths. In *FDG 2015 - Foundation of Digital Games*, 2015. [Peer-reviewed]

  Q. Xu, J. Tremblay, and C. Verbrugge. Generative Methods for Guard and Camera Placement in Stealth Games. In *Proceeding of the Tenth Annual AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment, AIIDE*, 2014. [Peer-reviewed]

  J. Tremblay, P. A. Torres, and C. Verbrugge. An Algorithmic Approach to Analyzing Combat and Stealth Games. In *CIG 2014 - International conference on Computational Intelligence and Games*, 2014. [Peer-reviewed]

  J. Tremblay, P. A. Torres, and C. Verbrugge. Measuring Risk in Stealth Games. In *FDG 2014 - Foundation of Digital Games*, 2014. [Peer-reviewed]

  J. Tremblay, C. Dragert, and C. Verbrugge. Target Selection for AI companions in FPS

games. In *FDG 2014 - Foundation of Digital Games*, 2014. [Peer-reviewed]

A. Yahyavi, J. Tremblay, C. Verbrugge, and B. Kemme. Towards the Design of a Human-Like FPS NPC using Pheromone Maps. In *International Games Innovation Conference, IGIC*, 2013. [Peer-Reviewed]

J. Tremblay and C. Verbrugge. Adaptive Companions in FPS Games. In *FDG 2013 - Foundation of Digital Games*, pages 229–236, 2013. [Peer-reviewed] **Best Paper Award**

J. Tremblay, B. Bouchard, and A. Bouzouane. Adaptive Game Mechanics for Learning Purposes - Making Serious Games Playable and Fun. In *CSEDU 2010 - Second International Conference on Computer Supported Education*, pages 465–470, 2010. [Peer-reviewed]

Workshop

J. Tremblay and C. Verbrugge. An Algorithmic Approach to Decorative Content Placement. In *Proceeding of the 2015 Workshop on Experimental AI In Games, EXAG*, 2015. [Peer-reviewed]

J. Tremblay, and C. Verbrugge. A Game Genre Agnostic Framework For Game-Design. In *Proceeding of the 2015 Fourth Workshop on Games and Software Engineering , GAS*, 2015. [Peer-reviewed]

J. Tremblay, A. Borodovski and C. Verbrugge. I Can Jump! Exploring Search Algorithms for Simulating Platformer Players. In *Proceeding of the 2014 First Workshop on Experimental AI In Games, EXAG*, 2014. [Peer-reviewed]

Q. Xu, J. Tremblay, and C. Verbrugge. Procedural Guard Placement for Stealth Games. In *Proceeding of the 2014 Fifth Workshop on Procedural Content Generation in Games, FDG*, 2014. [Peer-reviewed]

J. Tremblay. Improving Behaviour and Decision Making for Companions in Modern Digital Games. In *Proceeding of the 2013 Doctoral Consoritum at the Artificial Intelligence and Interactive Digital Entertainment (AIIDE)*, 2013. [Peer-reviewed]

J. Tremblay, P. A. Torres, N. Rikovitch and C. Verbrugge. An Exploration Tool for Predicting Stealthy Behaviour. In *Proceeding of the 2013 Second AIIDE Workshop on Artificial Intelligence in The Game Design Process*, 2013. [Peer-reviewed]

Book Chapter

J. Tremblay, B. Bouchard, and A. Bouzouane. Understanding and Implementing Adaptive Difficulty Adjustment in Video Games. In IGI Global, editor, *Algorithmic and Architectural Gaming Design: Implementation and Development*, pages 82–106. 2011. [Peer-reviewed]

PRESENTATIONS

Clustering Player Paths 2015
FDG, Asilomar Conference Grounds in Pacific Grove, CA, USA

Algorithm? 2015
SUS Academic Week, McGill, Montreal, Canada

An Algorithmic Approach to Analyzing Combat and Stealth Games 2014
CIG, Dortmund, Germany

From Skyrim to Metal Gear Solid, a Buddy AI journey 2014
Tech-talk at Ubisoft, Montreal, Canada

Measuring risk in stealth games 2014
FDG, Between Florida, USA and Cozumel, Mexico

Target selection for AI companions in FPS games   2014
    FDG, Between Florida, USA and Cozumel, Mexico

Procedural guard placement for stealth games   2014
    FDG, Between Florida, USA and Cozumel, Mexico

An Exploration Tool for Predicting Stealthy Behaviour   2013
    IDPV, AIIDE, Boston, United States of America

An Exploration Tool for Predicting Stealthy Behaviour   2013
    McGill University, Montréal, Québec, Canada

Adaptive Companions in FPS Games   2013
    FDG, Chania, Crete, Greece

Adaptive Companions in Games   2013
    McGill University, Montréal, Québec, Canada

The Meaning of Play   2011
    Riverview Center, Montréal, Québec, Canada

Dynamic Difficulty Applied to Serious Games   2010
    Montréal International Game Summit, Montréal, Québec, Canada

Adaptive Serious Games   2010
    Conference on Computer Supporter Education, Valancia, Spain

SERVICES
    Reviewer
        Experimental Artificial Intelligence in Games (EXAG)   2014-2015

    President of Computer Science Graduate Society (CSGS)   2013-2015
    McGill University
    Coordinating the society and its member
    Developed relationships with different university organisations e.g. PGSS, SOCS, CSUS, etc.

    VP Social CSGC   2012
    McGill University
    Organized various activities for graduate students at McGill and created CSGC's website

    Bureau Voyage Executive (*Student Travel Association*)   2010-2011
    Université du Québec à Chicoutimi
    Organized various activities for students, such as an all included trip to Toronto

    Teaching Assistant   2007-2013
    Corrected and graded assignments, and taught tutorials for graduate and undergraduate level courses.

    McGill University
      Modern Computer Games - COMP-521   2013

    Université du Québec à Chicoutimi
      Computer-based Animation (Animation par ordinateur) - 8TRD137   2011
      Video Games Conception (Réalisation de jeu vidéo) - 8GIF180   2009
      Video Games Design (Conception de jeux vidéo) - 8GIF150   2008
      Oriented Object (C++ Programmation visuelle) - 8PRO114   2007

LANGUAGES	**French**
	Mother tongue
	English
	Excellent speaking, reading, writing and listening
REFERENCES	Available upon request