

Geneva M. Smith

✉ smithgm@mcmaster.ca

🌐 GenevaS

in [genevamsmith](#)

🆔 0000-0002-6015-2589

🏷️ Geneva-Smith-4

🌐 <https://www.cas.mcmaster.ca/~smithgm/>

Summary

Ph.D. Software Engineering, 2023

M.A.Sc. Software Engineering, 2017

Game Design, Affective Computing, Human-Computer Interactions

Canadian Citizen

Language: English (Native)

Education

- 2017–2023 Ph.D., Software Engineering, McMaster University
Thesis: Start Your EM(otion En)gine: Towards Computational Models of Emotion for Improving the Believability of Video Game Non-Player Characters (<http://hdl.handle.net/11375/28699>)
Supervisor: Dr. Jacques Carette
- 2014–2017 M.A.Sc., Software Engineering, McMaster University
Thesis: GLaDOS: Integrating Emotion-Based Behaviours into Non-Player Characters in Computer Role-Playing Games (<http://hdl.handle.net/11375/21369>)
Supervisor: Dr. Jacques Carette
- 2009–2014 B.Eng., Software Engineering & Game Design (With Distinction), McMaster University

Publications

Refereed Journal Papers

- 2022 **Geneva M. Smith** and Jacques Carette. 2022. What Lies Beneath—A Survey of Affective Theory Use in Computational Models of Emotion. *IEEE Transactions on Affective Computing* 13, 4 (Oct.–Dec. 2022), 1793–1812. <https://doi.org/10.1109/TAFFC.2022.3197456>
- 2019 **Geneva Smith** and Jacques Carette. 2019. Design Foundations for Emotional Game Characters. *Eludamos: Journal for Computer Game Culture* 10, 1 (2019), 109–140. <https://doi.org/10.7557/23.6175>

Refereed Conference Papers

- 2015 **Geneva Smith**, Robert J. Teather, Jordan Lass, Jacques Carette. 2015. Effects of Interior Bezel Size and Configuration on Gaming Performance with Large Tiled Displays. In *Proceedings of the 2015 IEEE Games Entertainment Media Conference (GEM 2015)*. October 14–16, 2015, Toronto, ON, Canada. IEEE, New York, NY, USA, 130–137 (8 pages). <https://doi.org/10.1109/GEM.2015.7377209>

Preprints

- 2023 **Geneva M. Smith** and Jacques Carette. 2023. Start Your EMgine—A Methodology for Choosing Emotion Theories for Computational Models of Emotion. Revision submitted May 26, 2023 to *Entertainment Computing*. Available at <https://doi.org/10.2139/ssrn.4327741>

Invited Talks

Panel Presentations

- 2023 **Geneva M. Smith**. 2023. “Creating Believable Stories with NPCs”. In *Conversations with Games: Emergent Narratives and Gameplay Experience*. Panel presented at the 2023 International Conference on Games and Narrative (ICGAN). May 15–19, 2023, Online.
- 2019 **Geneva Smith**. 2019. “Towards Emotional Game Characters”. In Melody Devries (Chair) *Confronting Ecologies of Emotion: Design, Implementation, and the [Social] User Experience*. Panel presented at the 20th Annual Convention of the Media Ecology Association (MEA). June 27–30, 2019, Toronto, ON, Canada.

Research Talks

- 2023 **Geneva M. Smith** and Jacques Carette. 2023. “Building Test Cases for Video Game-Focused Computational Models of Emotion”. Presented at the *Interdisciplinary Design of Emotion Sensitive Agents (IDEA) International Workshop*. May 30, 2023. Held in conjunction with the 22nd International Conference on Autonomous Agents and Multiagent Systems (AA-MAS 2023), May 29–June 2, 2023, London, England. https://en.uit.no/project/idea/accepted_papers.
- 2017 **Geneva Smith**. 2017. “GLaDOS: Integrating Emotion-Based Behaviours into Non-Player Characters in Computer Role-Playing Games”. Presented at the 2017 IMMERSe Network Meeting. June 7–9, 2017, Ottawa, ON, Canada.
- 2015 **Geneva Smith**. 2015. “Ordinary People: Integrating Emotional Reactions into Non-Player Characters in Computer Role Playing Games”. Presented at the 2015 IMMERSe Network Meeting. November 26–27, 2015, Waterloo, ON, Canada.

Technical Talks

- 2019 **Geneva Smith**. 2019. “Problems That You’ve Solved in Video Games: The Agent Assignment Problem”. Presented in the LiCS Talk Series at McMaster University. July 19, 2019, Hamilton, ON, Canada.

Teaching Experience

McMaster University—Teaching Assistant

- Jan.–Apr. 2023 Game Design (SFWRENG 3GB3)
- Sept.–Dec. 2021 Human-Computer Interactions (COMPSCI/SFWRENG 4HC3) [Virtual]
- Sept.–Dec. 2018, Human-Computer Interactions (COMPSCI/SFWRENG 4HC3)
- Sept.–Dec. 2017,
- Sept.–Dec. 2016,
- Sept.–Dec. 2015,
- Sept.–Dec. 2014
- Jan.–Apr. 2022 Data Structures and Algorithms (COMPSCI 2C03) [Hybrid]
- Jan.–Apr. 2017, Data Structures and Algorithms (COMPSCI 2C03)
- Jan.–Apr. 2016
- Jan.–Apr. 2019, Practice and Experience: Basic Concepts (COMPSCI 1XA3), Introduction to Programming
- Jan.–Apr. 2018,
- Jan.–Apr. 2015
- Jan.–Apr. 2021 Software Testing (SFWRENG 3S03) [Virtual]
- Jan.–Apr. 2020 Software Testing (SFWRENG 3S03)
- Fall Term 2019 Software Requirements and Security Considerations (COMPSCI/SFWRENG 3RA3)
- Fall Term 2020 Digital Systems and Interfacing (SFWRENG 2DA4) [Virtual]

Student Supervision

- Sept. 2020– Present Brendan Fallon, M.Eng.
Department of Computing and Software, McMaster University
Thesis: “Interfacing Unity with a C# Library for Building Non-Player Characters with Emotion” (Title subject to change)
Co-supervising with Dr. Jacques Carette

Awards

Academic Merit

- 2022 Dean’s Award for Excellence in Communicating Graduate Research
- 2020 Ontario Graduate Scholarship (OGS)
- 2010, 2011, 2013 McMaster University Dean’s Honour List
- 2012 Golden Key International Honour Society Member
- 2009 The McMaster Honour Award, Level 2

Competition

- 2022 McMaster's Second Annual GradFlix Competition (3rd Place and People's Choice)
- 2022 Department of Computing and Software's Fourth Annual Poster Session (2nd Place Overall, 1st Place Aesthetics, 2nd Place People's Choice)
- 2018 Department of Computing and Software's Three-Minute Thesis (3MT) Competition (3rd Place)
- 2013 IBM Canada Markham Lab TechChallenge (3rd Place)

Service to Profession

Institutional, McMaster University

- 2021–2022 Department of Computing and Software Hiring Committee (Student Representative)
- Jan.–Apr. 2020 Department of Computing and Software Graduate Curriculum Planning Meeting (Student Representative)

G-Scale Lab, McMaster University

- 2022–Present Webmaster
- 2022 Web Designer & Developer
- 2018 Brand Design & Development

Peer Reviewer

- 2022, 2023 IEEE Transactions on Affective Computing (2 Articles)

Service to Community

McMaster University

- 2022–2023 Life in Computing and Software (Advisor to the Executive Core)
- 2019–2020 Life in Computing and Software (Vice President Administration)
- 2018–2019 Life in Computing and Software (General Member)
- 2014–2017 McMaster IEEE Student Branch (General Member)
- 2015–2016 McMaster IEEE Student Branch (Branch Secretary)

Other

- 2023 XP Game Developer Summit (Stage Manager)
- 2012–2013 IBM Future Blue Events (Event Leader)

Non-Academic Experience

- May 2012– Aug. 2013 DB2 Information Developer (Co-op), IBM Markham Lab

Technical & Design Projects

- 2022–Present EMgine C# Software Library (Design & Implementation)
- 2022–Present Personal Website (Design & Implementation)
- 2019 First Ubisoft Future Women in Games Mentorship (“The Temple” Game Pitch & Design Solution Presentation)
- 2017 Companion Cube Calculator (Design & Implementation)
- 2017 Bethesda's *The Elder Scrolls V: Skyrim* “GLaDOS” Mod (Design & Implementation)