

MAGY SEIF EL-NASR

Professor and Vice Chair of Serious Games Program

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Computational Media Department, Jack Bskin School of Engineering, University of California at Santa Cruz

EDUCATION

Northwestern University, PhD Computer Science, 2003

Dissertation: ELE Expressive Lighting Engine for Automating Lighting Design for Interactive Narrative.

Advisor: Ian Horswill

Texas A&M University, MS Computer Science, 1998

Thesis: Modeling Emotion Dynamics in Intelligent Agents. Advisor: John Yen

American University in Cairo, BS Computer Science, 1995

POSITIONS

2020- **Full Professor and Vice Chair of Serious Games Program,
University of California at Santa Cruz**
Computational Media (tenure home)
Jack Baskin School of Engineering

2020 **Full Professor,**
Northeastern University
Khoury College of Computer Sciences (tenure home)
and *College of Arts, Media and Design, Art+Design Department*

2011-2020 **Associate Professor (tenured),**
Northeastern University
Khoury College of Computer Sciences (tenure home)
and *College of Arts, Media and Design, Art+Design Department*

2012-2015 **Director of Game Educational Programs and Research,**
Northeastern University

2007-2011 **Assistant Professor,**
Simon Fraser University
School of Interactive Arts and Technology

2003-2007 **Assistant Professor,**
Pennsylvania State University
College of Information Sciences and Technology

2002-2003 **Lecturer,**
Northwestern University
Computer Science Department

1998-1999 **Assistant Lecturer,**
Texas A&M University
Computer Science Department

HONORS AND AWARDS

Arena Research Cluster

2020

A cluster of researchers who work on E-Sports. Website: <https://arc.york.ac.uk/>.

HEVGA Fellow

2017

HEVGA is The Higher Education Video Game Alliance (HEVGA) new organization with a mission to create a platform for higher education leaders which will underscore the cultural, scientific, and economic importance of video game programs and scholarship in colleges and universities.

I was selected as 1 of 31 scholars into the inaugural cohort of fellows, who are recognized as senior scholars who have made significant contribution to the field of game design, theory, and research.

Honorable Mentions

- Hartevelde, C., Kleinman, E., Rizzo, P., Schouten, D., Nguyen, T. H., Liberty, S., Kimbrough, W., Fombelle, P. and **Seif El-Nasr, M.** (2019). Teamwork and Adap-tation in Games (TAG): A Survey to gauge Teamwork. Foundations of Digital Games.

Best Paper Awards

- Melcer, E., Nguyen, T., Chen, Z., Canossa, A., **Seif El-Nasr, M.** and Isbister, K. (2015). Games Research Today: Analyzing the Academic Landscape 2000-2014. Foundations of Digital Games.
- Nguyen, T., **Seif El-Nasr, M.**, and Canossa, A. (2015). Glyph: Visualization Tool for Understanding Problem Solving Strategies in Puzzle Games. Foundations of Digital Games.
- **Seif El-Nasr, M.** and Horswill, I. (2003). Real-Time Lighting Design for Interactive Narrative. International Conference on Virtual Storytelling, pp. 12-20, France, November.
- **Seif El-Nasr, M.**, Ioerger, T., and Yen, J. (1999). PETEEI: A PET with Evolving Emotional Intelligence. Autonomous Agents99, pp. 219-257, Seattle, WA.

Research Excellence Award

1998

Texas A&M University

EXTERNAL FUNDING**In Progress****Total=approximately\$1.7M**

- **NSF:** Collaborative Research: Open Player and Community Modeling as a Learning Tool. **M. Seif El-Nasr (PI)**, Jichen Zhu (Co-PI), Brain Smith (Co-PI). **\$750,000**. Sept 2019-2022. Contribution: 75%. *This grant has been recommended for funding on June 12, 2019.*
- **Charles River Analytics:** HI-CATALYST (Hap Inversion for Cyber ATack AnALYSis). **M. Seif El-Nasr (PI)**, Subcontract for ONR grant with Bryan Loyall (PI) at Charles River Analytics. **\$600,000**. September 2020-2022. Contribution: 100%.
- **NSF:** Using Game Design Mechanics as Metaphors to Enhance Learning of Introductory Programming Concepts. **M. Seif El-Nasr (PI)**, Elizabeth Rowe (TERC) (Co-PI). **\$399,952.00**. Sept 2018-2021. Contribution: 90%.
- **NSF:REU** for grant Using Game Design Mechanics as Metaphors to Enhance Learning of Introductory Programming Concepts. **M. Seif El-Nasr (PI)**. **\$32,000.00**. Sept 2019-2021. Contribution: 100%.

Completed**Total=approximately\$6M**

- **Charles River Analytics:** HI-CATALYST (Hap Inversion for Cyber ATack AnALYSis). **M. Seif El-Nasr (PI)**, Subcontract for ONR grant with Bryan Loyall (PI) at Charles River Analytics. **\$73,811**. June 2019-2020. Contribution: 100%.
- **NSF (CHS):** Crowd Sourcing Narrative-based Social Training Simulations. S. Marsella (PI), **M. Seif El-Nasr (Co-PI)**. **\$493,048**. September 2015-2019. Contribution: 50%.

- **NSF (CHS):** Experiential Learning Systems for Promoting Wellness in Low-Income Families. Andrea Parker (PI), Carmen Sceppa (Co-PI), Jessica Hoffman (Co-PI), **M. Seif El-Nasr (Co-PI)**. **\$499,470**. September 2016-2019. Contribution: 4%.
- **DARPA:** Advancing methodology for social science research using Alternate Reality Games. **M. Seif El-Nasr (PI)**, Casper Hartevelde (Co-PI), Paul Fombelle (Co-PI), and Poala Rizzo (Co-PI). **\$568,830.00**. Sept 2017-2018. Contribution: 70%.
- **Army SBIR:** Soldier Sourcing Insights Early using a Game Environment (SSIEGE). **M. Seif El-Nasr (PI)**, Alessandro Canossa (Co-PI). **\$299,444**. January 2017-2019. Contribution: 80%.
- **IARPA:** Litmus: Detect Espionage Using Active Indicators. **M. Seif El-Nasr (PI)**, Alessandro Canossa (Co-PI). **\$894,176.00**. March 2016- August 2018. Contribution: 80%.
- **Army SBIR:** Soldier Sourcing Insights Early using a Game Environment (SSIEGE). **M. Seif El-Nasr (PI)**, Alessandro Canossa (Co-PI). **\$15,439.25**. October 2015-May 2016. Contribution: 80%.
- **DARPA:** Evaluation and Visualization Tools for Crowdsourcing Games. **M. Seif El-Nasr (PI)**. **\$340,963**. June 2015-March 2016.
- **Boston Public Health Commission:** Game Techniques to Evaluate Early Testing of HIV. **M. Seif El-Nasr (PI)**. **\$10,482.02**. January 2015-August 2015.
- **NU-NSF Advance:** Virtual Interactive Theatre of the Oppressed a Method for Training Awareness and Coping with Oppressive Scenarios. **M. Seif El-Nasr (PI)**. **\$80,000**. January 2015-2016.
- **Aetna Foundation:** Using Social Media and Gamification Tactics for Improving Physical Activity and Eating Behaviors. **M. Seif El-Nasr (PI)**, M. Shiyko (Co-PI), C. Sceppa (Co-PI). **\$30,000**. April 2013-June 2015. Contribution: 80%.
- **NIH (R21):** Mobile Eye Tracking: Tool for Investigating Emotion Regulation Across Adulthood.D. Issacowitz (PI) and **M. Seif El-Nasr (Co-I)**. **\$405, 953.34**. July 2013-June 2015. Contribution:20%.
- **NSF (CHS):** VPAL Virtual Personality Assessment Laboratory. A. Canossa (PI), **M. Seif El-Nasr (Co-PI)**, Randy Colvin (Co-PI). **\$247,546.00**. September 2013-August 2015. Contribution: 33%.
- **NSERC RTI:** Adaptive 3D Environments. **M. Seif El-Nasr (PI)**. **\$54,045**. April 2011-2012.
- **MITACS NSERC:** Game Metrics, Data Mining, Social Network Analysis. **M. Seif El-Nasr (PI)**. **\$15,000**. October 2011-April 2012.
- **NSERC Engage:** A Temporal-Narrative Engine for Personalized Photo-Based Storytelling. **M. Seif El-Nasr (PI)**. **\$24,850**. January 2011-July 2011.
- **NSERC Engage:** Using Visualization to Enhance A Game Designed for Health. **M. Seif El-Nasr (PI)**. **\$20,740**. January 2011-August 2011.
- **MITACS NSERC:** Social Games and Health. **M. Seif El-Nasr (PI)**. **\$15,000**. November 2010-April 2010.
- **NSERC (NCE):** Visualization and Evaluation of Virtual Worlds and Games. K. Booth (PI), **M. Seif El-Nasr (Project-Lead and Network Investigator)**, 32 Network Investigator Nationwide, in Canada. **\$23M**. January 2010-2014, Contribution: \$275,000.
- **MITACS NSERC:** User Interfaces, Touch-based Systems, Radiology-based interfaces. **M. Seif El-Nasr (PI)**. **\$15,000**. July 2010-December 2010.
- **MITACS NSERC:** User Experience Research, Game Usability, Biometrics. **M. Seif El-Nasr (PI)**. **\$15,000**. July 2010-December 2010.
- **Canada Council and NSERC:** Meaning of Motion. L. Bartrym (PI), **M. Seif El-Nasr (Co-PI)**, T. Schiphorst (Co-PI). **\$470,000**. October 2009-October 2012. Contribution: 33%.
- **SSHRC:** Digital video illumination. R. Gardiner (PI), **M. Seif El-Nasr (Co-PI)**. **\$203,000.00**. March 2009-2012. Contribution: 50%.

- **IARPA: VERUS** (Virtual Environments and Real User Studies). S. deCastle (PI), J. Janson (Co-PI), **M. Seif El-Nasr (Co-PI). \$380,000**. October 2009-March 2011.
- **MITACS: Exploring Quantitative Methods for Evaluating Sports Games**. **M. Seif El-Nasr (PI). \$15,000**. November 2009-April 2010.
- **MITACS: Developing Interfaces and Designs for Playing together within Virtual Worlds**. **M. Seif El-Nasr (PI). \$30,000**. January 2009-March 2009.
- **NSERC: Support Automatic Systems for Visual Design of Interactive Entertainment**. **M. Seif El-Nasr (PI). \$85,000**. March 2008-2012.
- **Canada Heritage: CAT Games**. S. Dipoala (PI), J. Bizzochi (Co-PI), **M. Seif El-Nasr (Co-PI). \$80,000**. March 2008-2009. Contribution: 33
- **Lockheed Martin: Support Research on Intelligent Information Interpretation, Search and Retrieval**. D. Hall (PI), M. McNeese (Co-PI), J. Yen (Co-PI), **M. Seif El-Nasr (Co-PI). \$120,000**. March 2006-2007. Contribution: 80%.
- **Lockheed Martin: Support Research on Human Centric Interactivity Systems**. D. Hall (PI), M. McNeese (Co-PI), J. Yen (Co-PI), **M. Seif El-Nasr (Co-PI). \$96,000**. September 2004-December 2006. Contribution:80%.
- **Lockheed Martin: Support research on Intelligent Information Interpretation, Search, and Retrieval**. D. Hall (PI), E. Rotthoff (Co-PI), F. Fonseca (Co-PI), **M. Seif El-Nasr (Co-PI). \$202,000**. September 2004-2005. Contribution: 80%.

INTERNAL FUNDING

In Progress

- **Citris: Integrating Theory of Mind in AI Models: Strategy Discovery from Human Behavioral Data**. **Magy Seif El-Nasr (PI)**, Kosa Goucher-Lambert (Co-PI). **\$57,889**. 2021-2022. Contribution: 50%. Ref: <https://citris-uc.org/2020-citris-core-seed-funding-awards-announced/>

Completed

- **Tier 1: Measuring Team Performance with Alternate Reality Games**. Paul Frombelle (PI), Casper Hartevelde (Co-PI), Paola Rizzo (Co-PI), and **M. Seif El-Nasr (Co-PI). \$50,000**. 2017-2018. Contribution: 50%.
- **Tier 1: Investigating Trust and Nonverbal Behavior through Virtual Worlds**. *M. Seif El-Nasr (PI)*, D. Issacowitz (Co-PI), D. Desteno (Co-PI). **\$50,000**. 2013-2014. Contribution: 50%.
- **Tier 1: Educational Analytics: Maximizing the Value of Data-Driven Insights from Students Performance and Activity in Online Classes**. A. Canossa (PI), *M. Seif El-Nasr (Co-PI)*, A. Drachen (Co-PI). **\$50,000**. 2013-2014. Contribution: 50%.
- **Tier 1: Biometric capture and analysis of emotional response in user centric interaction systems**. R. Pensyl (PI), *M. Seif El-Nasr (Co-PI)*. **\$50,000**. 2012-2013. Contribution: 50%.
- **Tier 1: Using Social Media and Social Games to get people to eat healthy and adopt exercise**. *M. Seif El-Nasr (PI)*, M. Shiyko (Co-PI), C. Sceppa (Co-PI). **\$50,000**. 2012-2013. Contribution: 50%.
- **School of Interactive Arts and Technology, Electronic Arts, Reboot Communications: Global Game Jam**. *M. Seif El-Nasr (PI)*. **\$3,550**, October 2009-2012.
- **SSHRC-4A: Tangible Interface for Interactive Storytelling**. *M. Seif El-Nasr (PI)*. **\$10,000**. 2008-2010
- **Start-up and Presidents Grant: Infrastructure building and believable Characters**. *M. Seif El-Nasr (PI)*. **\$85,000**. 2007-2009
- **Institute of the Arts and Humanities: Course Sequence in Virtual Worlds and Immersive Environments**. W. Wake (PI), *M. Seif El-Nasr (Co-PI)*. **\$4,700**. 2005. Contribution: 50%.

- **Center for Interdisciplinary Research in Arts:** Mirage Project. *M. Seif El-Nasr (PI)*. **\$5,000**. 2002-2003.

PUBLICATIONS

Books and Edited Books

6 Books

- **Seif El-Nasr, M.**, Nguyen, Troung-Huy, Canossa, A., and Drachen, A. (in progress). *Game Data Science*. Oxford University Press.
- Tanenbaum, J., **Seif El-Nasr, M.**, Nixon, M. (Editors) (2014). *Nonverbal Communication in Virtual Worlds*. ETC Press.
- **Seif El-Nasr, M.**, Drachen, A. and Canossa, A. (Editors) (April 2013). *Game Analytics: Maximizing the Value of Player Data*. Springer. ***Received over 139,965 downloads and 347 citations as of Feb 2019. From Springer: "We are also delighted to tell you that your book was among the top 25% most downloaded eBooks in its respective eBook Collection in 2018."***
- **Seif El-Nasr, M.**, Consalvo, M. and Feiner, S. (Editors) (2012). *Proceedings of Foundations of Digital Games Conference*, ACM.
- Anacleto, J., Fels, S., Graham, N., Kapralos, B., **Seif El-Nasr, M.**, Stanley, K. (2011). *International Conference on Entertainment Computing 2011*. (Edited Volume), Springer.
- **Seif El-Nasr, M.** and Forbus, K. (2002). *Working Notes on Artificial Intelligence and Interactive Entertainment*, (Edited volume), AAAI.

Journal Papers

23 Journal Papers

1. Nguyen, T.-H. D., Melcer, E., Canossa, A, Isbister, K., and **Seif El-Nasr, M.** (2018). *Seagull: A Birds-Eye View of the Evolution of Technical Games Research*. Entertainment Computing, Elsevier.
2. Isaacowitz, D.M., Livingstone, K.M., Richard, M., and **Seif El-Nasr, M.** (2018). Aging and attention to self-selected emotional content: A novel application of mobile eye tracking to the study of emotion regulation in adulthood and old age. *Psychology and Aging*, Vol. 33, No. 2.
3. Jiang, Rui, McKanna, J., Calabrese, S., **Seif El-Nasr, M.**. (2017). *Iterative Design and Testing for the Development of a Game-Based Chlamydia Awareness Intervention: A Pilot Study*. Games for Health Journal.
4. Shiyko, M., Hallinan, S., **Seif El-Nasr, M.**, Durga, S., Sceppa, Carmen. (2016). *Effects of Playing a Serious Computer Game on Body Mass Index and Nutrition Knowledge in Women*. Journal of Medial Internet Research: Serious Games. Impact Factor 4.63
5. **Seif El-Nasr, M.**, Durga, S., Shiyko, M., and Sceppa, C. (2015). *Data-Driven Retrospective Interviewing (DDRI): A Proposed Methodology for Formative Evaluation of Pervasive Games*. Elsevier Entertainment Computing Journal. Impact Factor 1.65
6. Moura, D. and **Seif El-Nasr, M.** (2014). *A Pattern Language to Aid Navigation with 3D Video Games*. ACM Computers in Entertainment.
7. **Seif El-Nasr, M.**, Milam, D., and Maygoli, T. (2013). *Experiencing Interactive Narrative: A qualitative analysis of Faade*. Elsevier Entertainment Computing Journal, Vol. 4, No. 1, Elsevier. Impact Factor 1.65
8. Gagne, A., **Seif El-Nasr, M.**, Shaw, C. (2012). *Analysis of Telemetry Data from a Real Time Strategy Game: A Case Study*. ACM Computers in Entertainment, Vol. 10, No. 3.
9. **Seif El-Nasr, M.** and Maygoli, T. (2010). *Understanding the Underlying Patterns: Teaching Scientific Thinking through Building Games*. The International Journal of Science in Society, Vol. 2, No. 1, pp. 17-28.

10. **Seif El-Nasr, M.** and Vasilakos, T. (2009). Ambient Intelligence on the Dance Floor. In International Journal of Cognitive Informatics and Natural Intelligence (IJCiNi) Special Issue on Ambient Intelligence and Arts, Vol. 3, No. 2, pp. 1-17.
11. **Seif El-Nasr, M.**, Vasilakos, A., Rao, C., Zupko, J. (2009). Dynamic Intelligent Lighting for Directing Visual Attention in Interactive 3D Scenes, IEEE Transactions on Computational Intelligence and AI in Games, Vol. 1, No. 2, pp. 145-153. Impact Factor 1.48
12. **Seif El-Nasr, M.**, Al-Saati, M., Milam, D., and Niedenthal, S. (2008). Assassin's Creed - A Multicultural Read. Loading, Vol. 3, No. 1. Online.
13. **Seif El-Nasr, M.**, Vasilakos, T., and Robinson, J. (2008). Process Drama in the Virtual World - A Survey. International Journal of Arts and Technology (IJART), Vol. 1, No. 1, pp. 13-33.
14. **Seif El-Nasr, M.** and Vasilakos, T. (2008). DigitalBeing - Using the Environment as an Expressive Medium for Dance. An International Journal on Information Sciences, Informatics and Computer Science Intelligent Systems Applications, Special Issue on Ambient Intelligence, Elsevier, Vol. 178, No. 3, pp. 663-678. Published Impact Factor: 3.095.
15. **Seif El-Nasr, M.** (2007). Engagement, Interaction, and Drama Creating an Engaging Interactive Narrative using Performance Arts Theories. Interactions Studies, Vol. 8, No. 2, pp. 209-240. Published Impact Factor: 1.36.
16. **Seif El-Nasr, M.** and Niedenthal, S., Kenz, I., Almeida, P., and Zupko, J. (2006). Dynamic Lighting for Tension Design in Games. Game Studies: the International Journal of Computer Game Research, Vol. 7, No. 1. Online. Prestigious and well established journal in the area of game research.
17. **Seif El-Nasr, M.** (2005). Applying Principles from Performance Arts for an Interactive Aesthetic Experience, Intelligent Agent Magazine, Vol. 5, No. 2. Online.
18. **Seif El-Nasr, M.** (2005). Intelligent Lighting for Game Environments, Journal of Game Development, Vol. 1, Issue 2, pp. 17-50. Highly competitive. Prestigious and well established journal in the area of game research with a very well established editorial board within the field.
19. Yucel, I., Zupko, J., and **Seif El-Nasr, M.** (2006). Education, IT, Girls, and Game Modding. ITSE International Journal of Interactive Technology and Smart Education Journal, Special Issue on Smarter Use of Technology in Education. Vol. 3, No. 2, pp. 143-156.
20. **Seif El-Nasr, M.** and Smith, B. (2006). Learning Through Game Modding, ACM Computers in Entertainment, Vol. 4, Issue 1, Article No.7. Prestigious and well established journal in the area of game research.
21. **Seif El-Nasr, M.** and Horswill, I. (2004) Automating Lighting Design for Interactive Entertainment, ACM Computers in Entertainment, Vol. 2, No. 2, Article No. Prestigious and well established journal in the area of game research.
22. **Seif El-Nasr, M.** (2004) Interactive Narrative Architecture Based on Filmmaking Theory, International Journal on Intelligent Games and Simulation, Vol. 3, No. 1, pp. 29-36.
23. **Seif El-Nasr, M.**, Yen, J., and Ioerger, T. (2000) FLAME - A Fuzzy Logic Adaptive Model of Emotions, Autonomous Agents and Multi-agent Systems, Vol. 3, pp. 219-257. Acceptance rate 23%, Impact Factor 2.125. *Received over 536 citations as of Jan 2019.*

Peer Reviewed Conference/Workshop Papers

108 Papers

1. Partlan, N., Kleinman, E., Howe, J., Ahmad, S., Marsella, S., and *Seif El-Nasr, M.* (2021). Design-Driven Requirements for Computationally Co-Creative Game AI Design Tools. Foundations of Digital Games.
2. Shergadwala, M. and Seif El-Nasr, M. (2021). Human-Centric Design Requirements and Challenges for Enabling Human-AI Interaction in Engineering Design: An Interview Study. Proceedings of

International Design Engineering Technical Conferences Computers and Information in Engineering Conference.

3. Kleinman, E., **Seif El-Nasr, M.** (2021). Using Data to "Git Gud": A Push for a Player-Centric approach to the Use of Data in Esports, In EHPHCI: Esports and High Performance HCI Workshop, 2021 CHI Conference on Human Factors in Computing Systems.
4. Shergadwala, M.N., **Seif El-Nasr, M.** (2021). Esports Agents with a Theory of Mind: Towards Better Engagement, Education, and Engineering, In EHPHCI: Esports and High Performance HCI Workshop, 2021 CHI Conference on Human Factors in Computing Systems.
5. Saksono, H., Castaneda-sceppa, C., Hoffman, J., **Seif El-Nasr, M.**, and Parker, A. G. (2021). StoryMap: Using Social Modeling and Self-Modeling for Supporting Physical Activity Among Low-SES Families. CHI 2021.
6. Kleinman, E., Chojnacki, S., and **Seif El-Nasr, M.** (2021). The Gangs All Here: How People Used Games to cope with COVID19 Quarantine. CHI 2021.
7. Carstensdottir, E., Kleinman, E., Williams, R., and **Seif El-Nasr, M.** (2021). "Naked and on fire": Examining Player Agency Experiences in Narrative-Focused Gameplay. CHI 2021.
8. Bunian, S., Li, K., Jemmali, C., Hartevelde, C., Fu, Y., **Seif El-Nasr, M.** (2021). VINS: Visual Search for Mobile User Interface Design. CHI 2021.
9. Jemmali, C., Ithier, C., Cooper, S. and **Seif El-Nasr, M.** (2020). Grammar Based Modular Level Generator for a Programming Puzzle Game. Experimental AI in Games (EXAG) Workshop. Artificial Intelligence in Interactive Digital Entertainment (AIIDE).
10. Javvala, N., Hartevelde, C., and **Seif El-Nasr, M.** (2020). Understanding Player Patterns by Combining Knowledge-Based Data Abstraction with Interactive Visualization. CHI Play 2020.
11. Spatharioti, S., Fatehi, B., Smith, M., Rosenbloom, A., Miller, J., **Seif El-Nasr, M.**, Wylie, S. and Cooper, S. (2020). Tile-o-Scope AR: An Augmented Reality Tabletop ImageLabeling Game Toolkit. FDG 2020.
12. Kleinman, E., Ahmad, S., Teng, Z., Bryant, A., Nguyen, T., Hartevelde, C., and **Seif El-Nasr, M.** (2020). "And then they died": Using Action Sequences for Data Driven, Context Aware Gameplay Analysis. FDG 2020.
13. Villareale, J., Biemer, C., **Seif El-Nasr, M.** and Zhu, J. (2020). Toward Improving Reflection in Game-Based Learning: A Survey of Programming Games. FDG 2020.
14. **Seif El-Nasr, M.** and Kleinman, E. (2020). Data-Driven Game Development: Ethical Considerations. FDG 2020.
15. Carstensdottir, E., Partlan, N., Sutherland, S., Duke, T., Ferris, E., Richter, R. M., Valladares, M., and **Seif El-Nasr, M.** (2020). Progression Maps: Conceptualizing Narrative Structure for Interaction Design Support. CHI 2020.
16. Di Bartolomeo, S., Pandey, A., Leventidis, A., Saffo, D., Syeda, U. H., Carstensdottir, E., **Seif El-Nasr, M.**, Borkin, M. A., and Dune, C. (2020). Shapeshifting Timelines: Evaluating the Effect of Timeline Shape on Visualization Task Performance. CHI 2020.
17. Saksono, H., Castaneda-Sceppa, C., Hoffman, J., Morris, V., **Seif El-Nasr, M.**, and Parker, A. (2020). StoryFit: Designing Family Fitness App Engagement by Using Social Rewards and Reflection. CHI 2020.
18. Jemmali, C., Kleinman, E., Bunian, S., Almeda, M., Rowe, E. and **Seif El-Nasr, M.** (2020). MAADS: Mixed Approach for the Analysis of Debugging Sequences of Beginner Programmers. SIGCSE (SIG on Computer Science Education).

19. Kleinman, E., Carstensdottir, E. and **Seif El-Nasr, M.** (2019). It's all Greek to Me. ICIDS (International Conference on Interactive Digital Storytelling).
20. Ahmad, S., Bryant, A., Kleinman, E., Teng, Z., Nguyen, T., and **Seif El-Nasr, M.** (2019). Modeling Individual and Team Behavior through Spatiotemporal Analysis. CHI Play 2019.
21. Nathan Partlan, Elin Carstensdottir, Erica Kleinman, Sam Snodgrass, Casper Hartevelde, Gillian Smith, Camillia Matuk, Steven C. Sutherland and **Magy Seif El-Nasr.** (2019). Evaluation of an Automatically-Constructed Graph-Based Representation for Interactive Narrative. In proceedings of UX in AI workshop at FDG 2019.
22. **Magy Seif El-Nasr.** (2019). Academics without Border. In Workshop on Tenure and Promotion at Foundations of Digital Games.
23. Elin Carstensdottir, Erica Kleinman and **Magy Seif El-Nasr.** (2019). Player Interaction in Narrative Games: Structure and Narrative Progression Mechanics. Foundations of Digital Games.
24. Casper Hartevelde, Erica Kleinman, Paola Rizzo, Dylan Schouten, Truong Huy Nguyen, Samuel Liberty, Wade Kimbrough, Paul Fombelle and **Magy Seif El-Nasr.** (2019). Teamwork and Adaptation in Games (TAG): A Survey to gauge Teamwork. Foundations of Digital Games. (*Honorable Mention*).
25. Josh Aaron Miller, Uttkarsh Narayan, Matthew Hantsbarger, Seth Cooper and **Magy Seif El-Nasr.** (2019). Expertise and Engagement: Re-Designing Citizen Science Games With Players' Minds in Mind. Foundations of Digital Games.
26. Feng, D., Carstensdottir, E., **Seif El-Nasr, M.**, Marsella, S. (2019). Exploring improvisational approaches to social knowledge acquisition. In the Proceedings of Autonomous Agents and Multi-Agent Systems (AAMAS).
27. Saksono, H., Castaneda-sceppa, C., Hoffman, J., **Seif El-Nasr, M.**, Morris, V., Parker, A. (2019). Social Reflections on Fitness Tracking Data: A Study with Families in Low-SES Neighborhoods. ACM CHI.
28. Feng, D., Sequeira, P., Carstensdottir, E., **Seif El-Nasr, M.**, and Marsella, S. (2018). Learning Generative Models of Social Interactions with Humans-in-the-Loop. International Conference on Machine Learning and Applications (ICMLA).
29. Partlan, N., Carstensdottir, E., Snodgrass, S., Kleinman, E., Smith, G. M., Hartevelde, C., and **Seif El-Nasr, M.** (2018). Exploratory Automated Analysis of Structural Features of Interactive Narrative. In Proceedings of AIIDE (AI and Interactive Digital Entertainment) Conference. (*acceptance rate is 25%*)
30. Jemmali, C., Bunian, S., Mambretti, A., and **Seif El-Nasr, M.** (2018). Educational Game Design: An Empirical Study of the Effects of Narrative. Foundations of Digital Games.
31. Kleinman, E., Carstensdottir, E. and **Seif El-Nasr, M.** (2018). Going Forward by Going Back: Re-defining Rewind Mechanics in Narrative Games. Foundations of Digital Games.
32. Chen, Z., Nguyen, T. D., Xu, Y., Amato, C., Cooper, S., Sun, Y., and **Seif El-Nasr, M.** (2018). The Art of Drafting: A Team-Oriented Hero Recommendation System for Multiplayer Online Battle Arena Games. In Proceedings of the 12th ACM Conference on Recommender Systems, 2018. (*acceptance rate is 17.7%*)
33. Chen, Z., Amato, C., Nguyen, T. D., Cooper, S., Sun, Y., and **Seif El-Nasr, M.** (2018). Q-DeckRec: A Fast Deck Recommendation System for Collectible Card Games. In Computational Intelligence and Games (CIG).
34. Rizzo, P., Jemmali, C., Leung, A., Haigh, K., **Seif El-Nasr, M.** (2018). Detecting Betrayers in on-line Environments Using Active Indicators. SBP-BRiMS 2018.

35. Saksono, H., Castaneda-Sceppa, C., Hoffman, J., **Seif El-Nasr, M.**, Morris, V., and Parker, A. G. (2018). Family Health Promotion in Low-SES Neighborhood a Two-Month Study of Wearable Activity Tracking. CHI 2018.
36. Chen, Z., Xue, S., Kolen, J., Aghdale, N., Zama, K., Sun, Y., *Seif El-Nasr, M.* (2017). EOMM: An Engagement Optimized Matchmaking Framework. WWW.
37. Canossa, A., Badler, J., Anderson, E., & **Seif El-Nasr, M.** (2016). Eliciting Emotions in Design of Games a Theory Driven Approach. In 4th Workshop on Emotions and Personality in Personalized Systems (EMPIRE).
38. Chen, Z., Sun, Y., **Seif El-Nasr, M.**, and Nguyen, T. (2016). Player Skill Decomposition in Multiplayer Online Battle Arenas. Meaningful Play.
39. Feng, D., Carstensdottir, E., Carnicke, S., **Seif El-Nasr, M.**, Marsella, S. (2016). An Active Analysis and Crowd Sourced Approach to Social Training. International Conference on Interactive Digital Storytelling.
40. Canossa, A., Nguyen, T., **Seif El-Nasr, M.** (2016). G-Player: Exploratory Visual Analytics for Accessible Knowledge Discovery. Foundations of Digital Games.
41. Nguyen, T., Carstensdottir, E., **Seif El-Nasr, M.**, Gray, M., Isaacowitz, D., Desteno, D., Ngo, N. (2015). Modeling Warmth and Competence in Virtual Characters. Intelligent Virtual Agents (IVA) Conference.
42. **Seif El-Nasr, M.**, Durga, S., Shiyko, M., and Sceppa, C. (2015). Unpacking Adherence and Engagement in Persuasive Health Games. Foundations of Digital Games.
43. Canossa, A., Badler, J., **Seif El-Nasr, M.**, Tignor, S., and Colvin, R. (2015). In Your Face(t) Impact of Personality and Context on Gameplay Behavior. Foundations of Digital Games.
44. Subramanian, S., Hallinan, S., **Seif El-Nasr, M.**, Shiyko, M., and Sceppa, C. (2015). Investigating Behavior Change Indicators and Cognitive Measures in Persuasive Health Games. Foundations of Digital Games.
45. Melcer, E., Nguyen, T., Chen, Z., Canossa, A., **Seif El-Nasr, M.** and Isbister, K. (2015). Games Research Today: Analyzing the Academic Landscape 2000-2014. Foundations of Digital Games. (Won best paper award)
46. Nguyen, T., **Seif El-Nasr, M.**, and Canossa, A. (2015). Glyph: Visualization Tool for Understanding Problem Solving Strategies in Puzzle Games. Foundations of Digital Games. (Won best paper award)
47. Durga, S., **Seif El-Nasr, M.**, Shiyko, M., Sceppa, C., Naab, P., and Andres, L. (2013). Leveraging Social Play in Health-Based Games to Promote Sustained Behavior Change in Healthy Eating and Exercise. DIGRA.
48. Canossa, A., **Seif El-Nasr, M.**, Nelson, M., Togelius, J. (2013). Players, Mice, and Analytics: A Behaviorist Renaissance. DIGRA.
49. Milam, D., **Seif El-Nasr, M.**, Bartram, L. (2013). Visual Motion in a Railed Shooter Game: A Designer Study. Foundations of Digital Games.
50. Llanso, D., Gamex-Martan, M., Gamez-Marten, P., Gonzalez-Calero, P., and **Seif El-Nasr, M.** (2013). Tool-supported Iterative Learning of Component-based Software Architecture for Games. Foundations of Digital Games.
51. Moura, D., **Seif El-Nasr, M.**, Bartram, L. (2012). Evaluating the effect of speed of moving elements on players performance in 3D game environments. International Game Innovation Conference.

52. Aghabeigi, B., **Seif El-Nasr, M.**, Calvert, T., Riedewald, M. (2012). Assistive Design and Production in Computer Games: Parametric Systems, Data Mining, Visual Analytic. International Game Innovation Conference.
53. Milam, D., **Seif El-Nasr, M.**, Bartram, L., Aghabeigi, B., Tan, P. (2012). Visual Designs: Effects on Workload and Performance in a Railed-Shooter Game. International Conference on Entertainment Computing (ICEC).
54. Seaborn, K., **Seif El-Nasr, M.**, Milam, D., Yung, D. (2012). Programming, PWNed: Using Digital Game Development to Enhance Learners Competency and Self-Efficacy in a High School Computing Science Course. SIGCSE.
55. **Seif El-Nasr, M.**, Desurvire, H., Nacke, L., Drachen, A., Calvi, L., Isbister, K., Bernhaupt, R. (2012). Game User Research. Proceedings of the 2012 ACM annual conference extended abstracts on Human Factors in Computing Systems Extended Abstracts.
56. **Seif El-Nasr, M.**, Andres, L., Lavender, L., Funk, N., Jahangir, N., and Sun, M. (2011). IgnitePlay: Encouraging and Sustaining Healthy Living through Social Games. International Games and Innovation Conference.
57. Gagne, A., **Seif El-Nasr, M.** and Shaw, C. (2011). A Deeper Look at the use of Telemetry for Analysis of Player Behavior in RTS Games. International Conference on Entertainment Computing (ICEC).
58. Milam, D., **Seif El-Nasr, M.**, Moura, D., and Bartram, L. (2011). Effect of Camera and Object Motion on Visual Load in 3D Games. International Conference on Entertainment Computing (ICEC).
59. Erfani, M. and **Seif El-Nasr, M.** (2011). Measuring the Impact of Knowledge Gained from Playing FPS and RPG Games on Gameplay Performance. International Conference on Entertainment Computing.
60. Amini, P. and **Seif El-Nasr, M.** The Effect of Privacy on Social Presence in Location-based Mobile Games. International Conference on Entertainment Computing, 2011.
61. Moura, D., **Seif El-Nasr, M.**, and Shaw, C. (2011). Visualizing and Understanding Players Behavior in Video Games: Discovering Patterns and Supporting Aggregation and Comparison, Siggraph 2011. Game Paper. Acceptance rate 11.6
62. **Seif El-Nasr, M.**, Isbister, K., Ventrella, J., Aghabeigi, B., Hash, C., Erfani, M., Morie, J., and Bishko, L. (2011). Body Buddies: Social Signaling through Puppeteering. HCII.
63. Tanenbaum, J., Tanenbaum, K., Antle, A., **Seif El-Nasr, M.**, Hatala, M. (2011). Experiencing the Reading Glove. Tangible, Embedded, and Embodied Interaction 11, pp. 137-144. Acceptance rate 32
64. Nixon, M., Pasquier, P., and **Seif El-Nasr, M.** (2010). DelsArtMap: Applying Delsartes Aesthetic System to Virtual Agents. Intelligent Virtual Agents (IVA), pp. 139-145. (short paper)
65. Lameman, B. L., **Seif El-Nasr, M.**, Drachen, A., Foster, W., Moura, D., and Aghabeigi, B. (2010). User Studies- A Strategy towards a successful Industry-Academic Relationship. Futureplay, pp. 134-142.
66. Erfani, M., **Seif El-Nasr, M.**, Milam, D., Aghabaigi, B., Lameman, B. A., Riecke, B. E., Maygoli, H., and Mah, S. (2010). The Effect of Age, Gender, and Previous Gaming Experience on Customization activities within games. Grace Hopper Celebration of Women in Computing. (proceedings online).
67. **Seif El-Nasr, M.** and Maygoli, T. (2010). Understanding the Underlying Patterns: Teaching Scientific Thinking through Building Games. Second International Conference on Science in Society.

68. Milam, D. and **Seif El-Nasr, M.** (2010). Design Patterns to Guide Player Movement in 3D Games. SIGGRAPH. Game Paper, pp. 37-42.
69. Milam, D. and **Seif El-Nasr, M.** (2010). Analysis of Level Design Push & Pull within 21 games. Foundations of Digital Games (FDG), pp. 139-146.
70. **Seif El-Nasr, M.** and Zammitto, V. (2010). User Experience Research for Sports Games. GDC Submit on Games User Research. (online). By invitation only, highly competitive.
71. **Seif El-Nasr, M.**, Aghabeigi, B., Milam, D., Erfani, M., Lameman, B., Maygoli, H., Mah, S. (2010). Understanding and Evaluating Cooperative Games. CHI 2010, pp. 253-262. Acceptance rate 22%
72. Erfani, M., **Seif El-Nasr, M.**, Milam, D., Aghabaigi, B., Lameman, B. A., Riecke, B. R., Maygoli, H. and Mah, S. (2010). The effect of age, gender, and previous gaming experience on game play performance, HCI International, IFIP WCC2010, Australia.
73. Tanenbaum, J., Tanenbaum, K. and **Seif El-Nasr, M.** (2010). Authoring Tangible Interactive Narratives Using Conceptual Hyperlinks. Foundations of Digital Game (FDG) Workshop on Intelligent Narrative Technologies III.
74. **Seif El-Nasr, M.** and Zammitto, V. (2010). Exploring Quantitative Methods for Evaluating Sports Games. CHI 2010 Workshop on Brain, Body and Bytes: Psycho physiological User Interaction. CHI Workshop.
75. Isbister, K., **Seif E-Nasr, M.**, and Ventrella, J. (2010). Avatars with Improved Social Signaling. CHI 2010 Workshop on Designing and Evaluating Affective Aspects of Sociable Media to Support Social Connectedness. CHI Workshop.
76. Ventrella, J., **Seif El-Nasr, M.**, Aghabeigi, B., and Overington. R. (2010). Gestural Turing Test: A Motion-Capture Experiment for Exploring Nonverbal Communication. AAMAS 2010 International Workshop on Interacting with ECAs as Virtual Characters.
77. Zupko, J. and **Seif El-Nasr, M.** (2009). System for Interactive Automated Lighting (SAIL). International Conference on the Foundations of Digital Games, pp. 223-230. Acceptance rate 25
78. Milam, D., **Seif El-Nasr, M.**, and Wakkary, R. (2008). Looking at the Interactive Narrative Experience through the Eyes of the Participants. International Conference on Interactive Storytelling, pp. 96-107. Full paper acceptance rate 15
79. **Seif El-Nasr, M.** and Wei, H. (2008). Exploring Non-Verbal Behaviors Using Acting Methods. International Conference on Interactive Storytelling, pp. 71-82. Full paper acceptance rate 15
80. **Seif El-Nasr, M.** and Zupko, J. (2008). A Tool for Adaptive Lighting Design. Sandbox at SIGGRAPH, pp. 135-142.
81. Tapia, A., **Seif El-Nasr, M.**, Yucel, I., Blodgett, B. (2008). Gaming for Girls: An Action-Research Intervention. Playing to Win: The Business and Social Frontiers of Videogames. State College, PA. Acceptance rate 31
82. Tapia, A., **Seif El-Nasr, M.**, Yucel, I., Zupko, J., and Maldonado, E. (2007). Engaging Passion for Computing: Using Virtual Gaming Environments to Motivate Girls to Follow IT Career Paths. 2007 Richard Tapia Celebration of Diversity in Computing Conference.
83. Tapia, A., **Seif El-Nasr, M.**, Yucel, I., Zupko, J., and Maldonado, E. (2007). Building Virtual Spaces: Games as Gatekeepers for the IT Workforce. The International Federation for Information Processing (IFIP) Working Group 8.2/9.5, Portland, Oregon, July.
84. **Seif El-Nasr, M.**, Yucel, I., Zupko, J., Tapia, A., Smith, B. (2007). Middle-to-High School Girls as Game Designers What are the Implications? Microsoft Academic Days on Game Development, pp. 54-58. Acceptance rate 28

85. **Seif El-Nasr, M.** and Yan, S. (2006). Visual Attention in 3D Games. International Conference on Advances in Computer Entertainment Technology (ACE), pp. 22-26.
86. **Seif El-Nasr, M.** (2006). Projecting Tension in Virtual Environments through lighting. International Conference on Advances in Computer Entertainment Technology (ACE), pp. 63-67.
87. **Seif El-Nasr, M.** and Gross, J. (2006). Fun and Games: On the Process of Game Design. In proceedings of Designing Interactive Systems (DIS) 2006, State College, PA, June 25.
88. Yucel, I., Zupko, J., and **Seif El-Nasr, M.** (2006). Using Game Modding to promote and provide basic IT skills to a female audience. Games, Learning, and Society, Madison, Wisconsin, June 16. Acceptance rate 44
89. **Seif El-Nasr, M.** and Vasilakos, T. (2006). DigitalBeing: an Ambient Intelligent Dance Space. World Congress on Computational Intelligence: Fuzz-IEEE, pp. 907-914, Vancouver, Canada, July. Acceptance rate lower than 30
90. Yan, S. and **Seif El-Nasr, M.** (2006). Visual Attention patterns in Games. Symposium of Eye Tracking Applications, San Diego, CA, March 21-24. Online.
91. **Seif El-Nasr, M.**, and Smith, Brian. (2005). Learning through Game Modding. Games, Learning, and Society, Madison, Wisconsin, June 23-24. Online. Acceptance rate is 13
92. **Seif El-Nasr, M.** (2005). Utility of Automatic Lighting Design in Games, Game Developers Conference, San Francisco, CA, March. Acceptance is based on reputation in the industry, for academics, acceptance is 2
93. **Seif El-Nasr, M.**, Zupko, J., and Miron, K. (2005). Intelligent Lighting for a better gaming experience, CHI 2005 Interactivity. Portland, Oregon, April.
94. **Seif El-Nasr, M.** (2004). Utility of Automatic Lighting Design in 3D Immersive Training Environments, 24th Army Science Conference, Orlando, FL, November. Acceptance rate: 20%.
95. **Seif El-Nasr, M.** and Rao, C. (2004). Visually Directing Users Attention in Interactive 3D Environments, Siggraph Poster Session. LA, CA, August 6-12, 2004. Nominated and entered 3rd round in research competition.
96. **Seif El-Nasr, M.**, Jones, R., and McNeese, M. (2004). A Scalable and Extensible Interactive Scenario Architecture for Distributed Command and Control Simulations. Proceedings of 2004 Command and Control Research and Technology Symposium, San Diego, CA, June.
97. **Seif El-Nasr, M.** (2004). A User-Centric Adaptive Story Architecture Borrowing from Acting Theories, International Conference on Advances in Computer Entertainment Technology ACE 2004, pp. 109-116, Singapore, Thailand, June.
98. **Seif El-Nasr, M.** (2004) Light AI. Presented at AAAI Workshop on Game AI.
99. **Seif El-Nasr, M.** and Horswill, I. (2003.) Expressive Lighting and Interactive Entertainment, IEEE International Conference on Multimedia and Expo Special Session on Multimedia Technologies for Gaming. Baltimore, MD, July.
100. **Seif El-Nasr, M.** and Horswill, I. (2003). Real-Time Lighting Design for Interactive Narrative. International Conference on Virtual Storytelling, pp. 12-20, France, November. Acceptance rate: 24
101. **Seif El-Nasr, M.** (2002). Story Visualization Techniques for Interactive Drama. Proceedings of AAAI Spring Symposium, CA.
102. **Seif El-Nasr, M.**, Ioerger, T., and Yen, J. (1999). PETEEI: A PET with Evolving Emotional Intelligence. Autonomous Agents99, pp. 219-257, Seattle, WA. Acceptance rate: 19
103. Widyantoro, D., Yin, J., **Seif El-Nasr, M.**, Wang, L., Zacchia, A., and Yen, J., (1999). Alipes: A Swift Messenger in Cyberspace. Proceedings of AAAI Spring Symposium, CA.

104. **Seif El-Nasr, M.**, Ioerger, T., Yen, J., House, D., and Parke, F. (1999) Emotionally Expressive Agents. Proceedings of Computer Animation 99, Seattle, WA, May.
105. **Seif El-Nasr, M.**, Ioerger, T., and Yen, J. (1999). A Web of Emotions. Proceedings of Workshop on Emotion-Based Agent Architectures part of Autonomous Agents 99, Seattle WA.
106. **Seif El-Nasr, M.** and Skubic, M. (1998). A Fuzzy Emotional Agent for Decision-Making in a Mobil Robot. Proceedings of Fuzz-IEEE, Anchorage, Alaska, May.
107. Yin, J., **Seif El-Nasr, M.**, Yang, L., and Yen, J. (1998). Incorporating Personality into a Multi-Agent Intelligent System for Training Teachers. Proceedings of the Fourth International Conference on Intelligent Tutoring Systems, San Antonio, Texas, August.
108. **Seif El-Nasr, M.** and Yen, J. (1998). Agents, Emotional Intelligence and Fuzzy Logic. Proceedings of the 17th Annual Meeting of the North American Fuzzy Information, Pensacola, FL, August.
109. **Seif El-Nasr, M.**, Ioerger, T., and Yen, J. (1998). Learning and Emotional Intelligence in Agents. Proceedings of AAAI fall symposium on Emotional Intelligence, FL.

Peer Reviewed Book Chapters

10 Peer Reviewed Book Chapters

1. Troung-Huy, D. Nguyen, Richards, M., **Seif El-Nasr, M.**, Isaacowitz, D. (2017). Interactive Visualization for Understanding Attention Patterns. In Eye Tracking and Visualization (ETVIS). Springer.
2. Truong-Huy D. Nguyen, Zhengzong Chen, **Seif El-Nasr, M.** (2014). Analytics-based AI-Techniques for Better Gaming Experience. Game AI.
3. Shree Durga, **Seif El-Nasr, M.**, Shiyko, M., and Sceppa, C. (2013). Designing Games to Promote Healthy Eating and Exercise A Study of Feasibility and Acceptability. Virtual and Augmented Reality in Healthcare, Springer.
4. **Seif El-Nasr, M.**, Zupko, J., Roa, C., and Almeida, P. (2011). Intelligent Adaptive Lighting Enhancing the Video Game Experience. In Calero, P. (Editor). Applied Research in Artificial Intelligence for Computer Games.
5. **Seif El-Nasr, M.**, Morie, J., and Drachen, A. (2011). A Scientific Look at the Design of Aesthetically and Emotionally Engaging Interactive Entertainment Experiences. In Didem (Editor). Affective Computing and Interaction: Psychological, Cognitive and Neuroscientific Perspectives.
6. **Seif El-Nasr, M.** and Zupko, J. (2010). Chapter 7: Lighting Design Tools for Interactive Entertainment. In George A. Tsihrintzis and Lakhmi C. Jain, Multimedia Services in Intelligent Environments - Integrated Systems.
7. **Seif El-Nasr, M.**, Bishko, L., Zammitto, V., Nixon, M., Wei, H., and Athanasios, V. (2009). Chapter 22: Believable Characters. In Borko Furht (Editor), Handbook of Digital Media in Entertainment and Arts.
8. Milam, D., **Seif El-Nasr, M.**, and Ron Wakkary. (2009). Chapter 30: Study of Interactive Narrative from Users Perspective. In Borko Furht (Editor), Handbook of Digital Media in Entertainment and Arts.
9. **Seif El-Nasr, M.** and Vasilakos, T. (2007). DigitalBeing: An Ambient Intelligence Interactive Dance Experience. In Janusz Kacprzyk (Editor). Studies in Computational Intelligence (SCI), Vol. 72, pp. 233-263, Springer Verlag: Berlin, Germany.
10. Tapia, A., **Seif El-Nasr, M.**, Yucel, I., Zupko, J., Maldonado, E. (2007) Building Virtual Spaces: Games as Gatekeepers for the IT Workforce. Crowston, K., Sieber, S. and Wynn, E. (Editors). Virtuality and Virtualization. Springer: Boston, pp. 317-334.

Other

Editor Reviewed Articles and Posters

1. Jemmali, C., Kleinman, E., Bunian, S., Almeda, M., Rowe, E. and **Seif El-Nasr, M.** (2019). Using Game Design Mechanics as Metaphors to Enhance Learning of Introductory Programming Concepts. Foundations of Digital Games Demo Track.
2. Fombelle, P. W., Hartevelde, C., Nguyen, T. N., Rizzo, P., Bunian, S., Javvaji, N., Amr, M., Nair, S., Kleinman, E., and **Seif El-Nasr, M.** (2018). Developing an AI model to capture how teams adapt in an unpredictable marketing environment. *Frontiers in Service*.
3. Bunian, S., Canossa, A., Colvin, R. and **Seif El-Nasr, M.** (2017) Modeling Individual Differences in Game Behavior using HMM. *AIIDE 2017, AAAI*
4. Carstensdottir, E., Kleinman, E., and Seif El-Nasr, M. (2017, November). Towards an Interaction Model for Interactive Narratives. In *International Conference on Interactive Digital Storytelling* (pp. 274-277). Springer, Cham.
5. Hallinan, S., Shiyko, M., **Seif El-Nasr, M.**, Durga, S., Castaneda-Sceppa, C. (2015). Impact of a Weight Loss Computer Game on Behavioral and Psychological Outcomes. *Association for Psychological Science Conference*.
6. Nguyen, T. H. D., Subramanian, S., **Seif El-Nasr, M.**, & Canossa, A. (2014). Strategy Detection in Wuzzit: A Decision Theoretic Approach. *ICLS Workshop*.
7. Kabakov, M., Canossa, A., **Seif El-Nasr, M.**, Badler, J. B., Colvin, R. C., Tignor, S., Chen, Z., Asarsa, K. (2014). A bottom-up method for developing a trait-based model of player behavior. *Work In Progress, CHI Play*.
8. **Seif El-Nasr, M.**, Nguyen, T., Carstensdottir, E., Gray, M., Isaacowitz, D., and Desteno, D. (2014). Social Gaming as an Experimental Platform. *Social Believability in Games Workshop at FDG 2014*.
9. Nacke, L., Mirza-Babaei, P., **Seif El-Nasr, M.**, Desurvire, H., Bernhaupt, R. (2014). Games and Entertainment Community SIG: Reaching Beyond CHI (SIG). *CHI 2014*.
10. Drachen, A., Canossa, A., and **Seif El-Nasr, M.** (2013). Intro to User Analytics. *Game Developers Magazine*.
11. **Seif El-Nasr, M.**, Gagne, A., Moura, D., Aghabeigi, B. (2013). Visual Analytics Tools: A lens into Players Temporal Progression and Behavior. *Game Analytics: Maximizing the Value of Player Data*, Springer.
12. **Seif El-Nasr, M.** (2013). Introduction. *Game Analytics: Maximizing the Value of Player Data*, Springer.
13. **Seif El-Nasr, M.** (2013). Interview with Darius Kazemi. *Game Analytics: Maximizing the Value of Player Data*, Springer.
14. **Seif El-Nasr, M.** and Canossa, A. (2013). Interview with Zynga. *Game Analytics: Maximizing the Value of Player Data*, Springer.
15. Desurvire, H. and **Seif El-Nasr, M.** (2013). Methods for Game User Research, part 2: The emerging study of player behavior to enhance game design decisions. *IEEE Graphics and Applications*.
16. **Seif El-Nasr, M.**, Desurvire, H., Aghabeigi, B., and Drachen, A. (2013). Game Analytics for Game User Research (Part 1): A CHI Workshop Review and Case Study. *IEEE Graphics and Applications*.
17. Shiyko, M., **Seif El-Nasr, M.**, Sceppa, C., Durga, S., and Naab, P. (2013). Using social gaming environment to promote healthy eating and exercising. *PLANET (Physical Activity Network Sydney) Symposium, Sydney, Australia*.
18. Shiyko, M., **Seif El-Nasr, M.**, Sceppa, C., Durga, S., and Naab, P. (2013). Using Social Gaming Environment to Promote Healthy Eating and Exercising. *Society of Ambulatory Assessment*.

19. Durga, S., **Seif El-Nasr, M.**, Shiyko, M., Sceppa, C., and Naab, P. (2013). Design of Social Games for Fostering Sustained Behavior Change in Healthy Eating and Exercise. *Games, Learning and Society*.
20. Nitsche, M., **Seif El-Nasr, M.**, Magerko, B., Burrill, D., Cameron, D. (2013). Video Games and Performance. *DIGRA*.
21. Milam, D., Bartram, L., and **Seif El-Nasr, M.** (2012). Effects of visual search conditions on performance in railed-shooter game. *Reconciling Player Experience Workshop at FDG 2012*.
22. Milam, D., Bartram, L., and **Seif El-Nasr, M.** (2012). Effects of visual search conditions on performance in railed-shooter game. *Reconciling Player Experience Workshop at FDG 2012*.
23. Milam, D., Bartram, L., and **Seif El-Nasr, M.** (2012). Correlation of eye fixation and pupillometry metrics with play performance in a railed-shooter game. *Reconciling Player Experience Workshop at FDG 2012*.
24. Milam, D., Bartram, L., and **Seif El-Nasr, M.** (2012). Investigation of expertise and visual balance in a railed-shooter game. *Reconciling Player Experience Workshop at FDG 2012*.
25. Moura, D., Bartram, L., and **Seif El-Nasr, M.** (2012). Navigation and player progress in 3D games. *Reconciling Player Experience Workshop at FDG 2012*.
26. Aghabeigi, B., Calvert, T., and **Seif El-Nasr, M.** (2012). Assistive design and production in computer games: parametric systems, data mining, visual analytic. *Reconciling Player Experience Workshop at FDG 2012*.
27. Milam, D., Bartram, L., and **Seif El-Nasr, M.** (2012). Design Patterns of Focused Attention. *Design Patterns in Games workshop at FDG 2012*.
28. Milam, D., **Seif El-Nasr, M.**, Bartram, L., Lockyer, M., Feng, C., and Tan, P. (2012). Toolset to Explore Visual Motion Designs in a Video Game. *Interactivity CHI 2012*.
29. **Seif El-Nasr, M.**, Moura, D., Aghabeigi, B., Zammitto, V., and Newton, P. (2011). A closer look at your players: the Interplay between Telemetry, eye tracking, physiological, and survey measures, *GRAND*.
30. Aghabeigi, B., **Seif El-Nasr, M.**, Isbister, K., Ventrella, J. (2011). Avatar Puppeteering: Body Buddies a Case Study for Social Signaling. *GRAND*.
31. Erfani, M., **Seif El-Nasr, M.**, Milam, D., Aghabeigi, B., Lameman, B., Riecke, B. E., Maygoli, H., and Mah, S. (2010). The Effect of Age, gender, and Previous Gaming Experience on Game Play Performance, *HCI International, IFIP WCC2010, Australia*.
32. **Seif El-Nasr, M.**, Al-Saati, M., Niedenthal, S., Milam, D. (2008). *Assassins Creed: A Multicultural Read*. *UBC Canadian Game Studies Association Conference*.
33. Milam, D., **Seif El-Nasr, M.**, and Wakkary, R. (2008). A Phenomenological Study on User Affect for Faade. *UBC Canadian Game Studies Association Conference*.
34. *Seif El-Nasr, M.*, and Vasilakos, T. (2008). Art and Technology Interdisciplinary Perspective a Survey. *International Journal on Computational Science Special Issue Computational Art Journal*. Introduction to special edition for the journal.
35. **Seif El-Nasr, M.** (2008). Computer Science Education through Games. *Journal of Game Development*, Vol. 3, No. 2. Introduction to special edition for the journal.
36. **Seif El-Nasr, M.** (August 28, 2006). Game Modding for Girls What are the Implications? *Gamasutra Education*. High Impact Industry Journal; Editorial reviewed.
37. **Seif El-Nasr, M.** and Wake, W. (August 18, 2006). Composing an Interdisciplinary Learning Environment for Teaching How to Build Video Games. *Gamasutra Education*. High Impact Industry Journal; Editorial reviewed.

38. **Seif El-Nasr, M.** (2006). Game Design Research. Journal of Game Development, Special Issue on Game Design Research. Refereed journal paper, one of the three most respected journals in the area of interactive entertainment.
39. **Seif El-Nasr, M.** and Zupko, J. (2006). A Tool for Aesthetic-based Lighting Design in Interactive 3D Environments. SandBox 2006. (Poster and Demo). Zupko and Seif El-Nasr Presented.
40. **Seif El-Nasr, M.**, Zupko, J., and Miron, K. (2005). Intelligent Lighting for a better gaming experience. CHI 2005 Interactivity. Portland, Oregon, April. Zupko and Seif El-Nasr Presented.
41. **Seif El-Nasr, M.** and Zupko, J. (2005). Exploring concepts of Lighting Design for 3D Video Games: Theory and Practice. Workshop on Game Aesthetics and Emotion: Light, Sound and Narrative. Sweden, Malmo.
42. **Seif El-Nasr, M.** (2004). Mirage, Presented by Pagulayan, R. at CHI 2004, SIG on Games and HCI.

INVITED TALKS AND PRESENTATIONS

Invited Talks 5 Keynotes, 2 Distinguished Lecture, and 1 Technical Briefing

- **Seif El-Nasr, M.** (2020). Behavior Modeling using Data from Games. UPenn.
- **[Distinguished Lecture] Seif El-Nasr, M.** (2019). Humanistic Computing. American University in Cairo Alumni Gathering in Boston part of the Centennial celebration of the American University in Cairo.
- **[Keynote] Seif El-Nasr, M.** (2019). Game User Research: Building Games that Make Social and Educational Impact. ICEC International Conference on Entertainment Computing. IFIP. Arequipa, Peru.
- **[Distinguished Lecture] Seif El-Nasr, M.** (2019). Game User Research: Building Games that Make Social and Educational Impact. Escuela Doctoral de Otono en comunicacion.
- **[Technical Briefing] Seif El-Nasr, M.** (2019). Developing Games that Capture and Engage Users. International Conference on Software Engineering (ICSE), Monterael.
- **[Keynote] Seif El-Nasr, M.** (2018). Understanding Group Dynamics in E-Sports MOBA Games. E-Sports Conference (ESC), University of California at Irvine.
- **Seif El-Nasr, M.** (2018). What Makes Games Fun? ONR Program Review Meeting, RPI.
- **Seif El-Nasr, M.** and Lin, M. (2016). Preparing Your Thesis Proposal and Becoming a PhD Candidate. CRA-Women Graduate Cohort Workshop.
- Isbister, K., **Seif El-Nasr, M.**, Wixon, D., and Laurel, B. (2015). When Intuition and Experience are NOT Enough: Perspectives on Teaching Students Advanced User Research Methods to Create Winning Designs. GDC Submit on Education
- **Seif El-Nasr, M.**, Whitehead, J., Phelps, A., Gibson, J. (2013). Building Successful Interdisciplinary Game Programs: Bridging the Disciplinary Gaps. GDC Submit on Education
- **Seif El-Nasr, M.** (2012). Game analytics and triangulation techniques to gain user insights. Game Show Network Digital, Boston.
- **[Keynote] Seif El-Nasr, M.** (2012). How can social and cooperative games be leveraged to enhance quality of life applications? PETRA 2012, Crete, Greece.
- **Seif El-Nasr, M.** (2011). Triangulation of Game Telemetry, Eye tracking, and Physiological Sensor Data, EA Dev Con.
- **Seif El-Nasr, M.** (2011). Pupeteering avatars to enable social signaling in Virtual Worlds, Workshop on Human Agent Social Interaction in Open Online Virtual Worlds.

- Moura, D., **Seif El-Nasr, M.** (2011). Visualizing and Understanding Players Behavior in Video Games: Discovering Patterns and Supporting Aggregation and Comparison, GUR 2011.
- **[Keynote] Seif El-Nasr, M.** (2010). Can we Design Games that can Entertain and Educate? Serious Games Winter School, Puerto Vallarta, Mexico.
- **[Keynote] Seif El-Nasr, M.** (2009). User Experience Research: Intersection between Psychology and Games. Interactive Entertainment Conference, Sydney Australia.
- **Seif El-Nasr, M.** (2009). Panel on What IGDA Can do for you, Game Developers Conference Vancouver, Future Play.
- **Seif El-Nasr, M.** (2009). Panel on Academia and Industry: exploring the divide within Game Field. Game Developers Conference Vancouver, Future Play.
- **Seif El-Nasr, M.** (2009). Student Independent Game Festival (IGF) Post-Mortem. Game Developers Conference.
- **Seif El-Nasr, M.** (2009). Panel: Academic/Industry Collaboration, Foundations of Digital Games 2009 with Tom McMail (Microsoft External Research), Mark Overmars (Utrecht University) and Bill Swartout (USC/ICT)
- **Seif El-Nasr, M.** (2008). Successful Game Programs, Game Developers Conference.
- **Seif El-Nasr, M.,** Gold, S., and Fullerton, T. (2007). Game Design Workshop, DIGRA, Tokyo, Japan.
- **Seif El-Nasr, M.** (2007). Game Modding as a Gateway to Computing and Media Literacy: A Myth or Reality. Nordic Game Conference, Sweden.
- Fullerton, T., Gold, S., **Seif El-Nasr, M.** (2007). So You Want to Start a Game Program? IGDA Education SIG presents the Curriculum Framework Initiative & Curricular Models. Siggraph, Educators Track.
- **Seif El-Nasr, M.** (2007). Working Lunch Roundtables. Game Developers Conference.
- **Seif El-Nasr, M.** (2006). What do Students Learn when they are Modding? Panel, Sandbox Symposium. (with Kurt Squire and Constance Steinkuehler and Alice Robinson)
- **Seif El-Nasr, M.** (2005). Desktop 3-D Interactive Drama Applying design principles from Performance Arts. HCI International 2005, Las Vegas Nevada, USA.

Invited Talks at Companies

9 Company Presentations

- **Seif El-Nasr, M.** and Nguyen, H. (2015). Game Analytics and Visualization Techniques to Gain User Insights. Charles River Analytics.
- **Seif El-Nasr, M.** (2012). Game analytics and triangulation techniques to gain user insights. Game Show Network Digital.
- **Seif El-Nasr, M.** (2009). User Experience Research: Intersection between Psychology and Games. Disney Research, California.
- **Seif El-Nasr, M.** and Milam, D. (2008). User Experience within Interactive Entertainment. Microsoft Research, Redmond, WA.
- **Seif El-Nasr, M.** (2008). Serious Game Design and Modding, RedHill Studios, San Francisco.
- **Seif El-Nasr, M.** (2007). Psychology behind Game Design and learning. Red Hill Studios, San Francisco, CA.
- **Seif El-Nasr, M.** (2007). Developing Tools That Enhance Interactive Experiences and Their Development Process. Microsoft Research, Redmond, WA.
- **Seif El-Nasr, M.** (2003). Visual Design Authoring Tools, EDC/Center for Children and Technology, NYC, NY.
- **Seif El-Nasr, M.** (2003). Visual Intelligence for Interactive Narrative, IBM T. J. Watson, NYC, NY.

STUDENTS/ADVISEES

Post Doctoral Fellows/Research Scientists**1 Current, 4 Completed***1 took faculty positions at Universities, 1 at Amazon R&D, and 1 at Google*· **Completed**

- Shree Durga, Completed 2015, Product Manager-Tech, Learning Technologies at *Amazon R&D*
- Troung Huy Dinh, Completed 2015, *Google*
- Hassen Gharbi, Completed 2015, *Assistant Professor at University of Trier at Tunisia.*
- Dylan Schouten, Post Doc at PLAIT Lab, *Northeastern University*

· **Current**

- Paola Rizzo, current Research Scientist

PhD Students**9 Current, 4 Completed***1 took faculty position at University and 3 took industry positions*· **Completed**

- David Milam, PhD completed 2013, *Experience Researcher at Autodesk*
- Maha Al-Saati, PhD completed 2008, *Assistant Professor at Imam Abdulrahman Bin Faisal University*
- Joseph Zupko, PhD completed 2009, *Engineer at Demiurge Studios*
- Zhengxing Chen, PhD Completed 2018, *Research Scientist at Facebook*

· **Current**

- Elin Carstensdottir, PhD Candidate, Admitted Fall 2013 - expected graduation in 2019, *Acting Assistant Professor at UCSC starting Fall 2019*
- Chaima Jemmali, PhD Student, Admitted Fall 2016
- Sara Banian, PhD Student, Admitted Fall 2016
- Joshua Miller (Co-advised with Seth Cooper, Khoury College of Computer Sciences), Admitted Student Fall 2017
- Abdel Rahman Amr Madkour, Admitted Student Fall 2017
- Sabbir Ahmed, Admitted Student Fall 2017
- Nathan Partlan, Admitted Student Fall 2017
- Colan Biemer (Co-advised with Seth Cooper, Khoury College of Computer Sciences), Admitted Student Fall 2019
- Zhaoqing Teng, Admitted Student Fall 2019

Visiting Scholars**4 Completed**· **Completed**

- Jiang Rui, School of Animation and Digital Arts, Communication University of China, Sept 2014-Dec 2015
- Dr. Sylvester Arnab, Senior Research Fellow, Disruptive Media Learning Lab, Coventry University, UK, 2015
- Dr. Chek Tien Tan, Lecturer, School of Software Faculty of Engineering & IT and Co-Director of Games Studio, University of Technology Sydney, 2016

- Fan Yang, Senior engineer in Tsinghua Tongfang, Beijing, China

Masters Students

3 Current, 7 Completed

· Completed

- Andre Gagne, Completed Summer 2011, *Software Engineer at Caradigm*
- Bardia Aghabeigi, Completed Spring 2011, *Senior Software Engineer at SAP*
- Pooya Amini, Completed Spring 2011, *Software Development Engineer at Amazon*
- Mona Erfani, Completed Fall 2010, *Software Engineer at Intel Corporation*
- Wendy Foster, Completed Summer 2010, *Data Science Manager at Wattpad*
- Michael Nixon, Completed Fall 2009, *PhD Student at Simon Fraser University*
- Priya Almeida, Completed Spring 2005, *Product Manager at Zonar Systems*

· Current

- Erica Klienman, Master's in Khoury College of Computer Sciences
- Andy Bryant, Master's in Khoury College of Computer Sciences
- Carter Ithier, Master's in Khoury College of Computer Sciences

Honors Student/Undergraduate Student Advising

3 Completed

College of Information Science and Technology, Penn State

· Completed

- Sheri Kayam, Winter 2001-Fall 2006, *Software Engineer Lockheed Martin*
- Geoffery MacGill, Winter 2001-Summer 2005
- M. E. Chung, Winter 2001-Fall 2006, *Game Designer at Bungie*

On Committee/Examiner

2 in-progress, 13 Completed

· Completed

1. Michail Albert Schwab, PhD, completed 2020, Khoury College of Computer Sciences, Northeastern University Improvements to the Data Visualization Ecosystem.
2. Herman Saksono, PhD, completed 2020, Khoury College of Computer Sciences, Northeastern University
3. Sophie Spatharioti, PhD, completed 2020, Khoury College of Computer Sciences, Northeastern University
4. Dan Feng, PhD, completed, Khoury College of Computer Sciences, Northeastern University
5. Yuyu Xu, PhD, completed, Khoury College of Computer Sciences, Northeastern University
6. Britton Horn, PhD, completed, Khoury College of Computer Sciences, Northeastern University
7. Ceyhun Efe Karbeyaz, PhD, Completed, Electrical and Computer Engineering, Northeastern University
8. Krystina Madej, PhD, Completed, School of Interactive Arts and Technology, Simon Fraser University
9. Hector Larios, PhD, completed, School of Interactive Arts and Technology, Simon Fraser University
10. Langxuan Yin, PhD, completed, Khoury College of Computer Sciences, Northeastern University
11. Brent Harrison, PhD, completed, North Carolina State University

12. Brett Bixler, PhD, Completed, School of Information Science and Technology, Penn State University
13. Herman Saksono, MSc, completed, Khoury College of Computer Sciences, Northeastern University
14. Rajneesh Sudhakar, MSc, Completed, School of Information Science and Technology, Penn State University
15. Ben Lin, MSc, Completed (external), School of Interactive Arts and Technology, Simon Fraser University
16. Joshua Tanenbaum, MSc, Completed, School of Interactive Arts and Technology, Simon Fraser University

· **Current**

1. Johannes Pfau, PhD, in-progress (external examiner), Faculty 3: Mathematics / Computer Science, University of Bremen

PATENTS AND SOFTWARE PRODUCTS

Demos and Products

Manchuria: War of Resources (M:WoR), 2012
 SAIL: Lighting System, 2009
 Light and Emotions, 2005
 Mirage an Interactive Drama, 2005
 Art Installation: The Portal, 2002

Patents

Glyph Visualization System
 Stratmapper Visualization System
 ELE the Expressive Lighting Engine (provisional)

EXTERNAL SERVICE

Leadership Positions

chronologically ordered

- Doctoral Consortium Co-Chair CHI Play 2021.
- SubCommittee Chair (SC) CHI 2021 Subcommittee on User Experience and Usability, 2021
- Track Chair Game Analytics and Visualization, Foundations of Digital Games, 2020
- Workshop Co-Chair Game Intelligence and Informatics Workshop, part of Pacific Asia Conference on Knowledge Discovery and Data Mining (PAKDD), 2020.
- Workshop Co-Chair User Experience (UX) of Artificial Intelligence in Games, part of FDG (Foundations of Digital Games) 2019
- *Associate Chair (equivalent to Area Chair) for CHIPlay*, 2019, 2015
- *Associate Chair (equivalent to Area Chair) for CHI*, 2018, 2017, 2016, 2015
- *International Scientific Council* Andalousian Research Institute on Communication, 2018-.
- *Advisory Board* SUNY Polytechnic, 2018-
 Advisory board of the game program at SUNY polytechnic.
- *Steering committee*, ICEC, 2017
- *Workshop Chair for IVA Playful Virtual Characters*, 2014
- *Game Spotlight Co-chair for CHI*, 2014
- *Program Co-Chair*, PETRA (Int'l Conf. on PErvasive Technologies Related to Assistive Environments), 2013
- *Local Chair*, AI and Interactive Digital Entertainment, 2013
- *Student Game Competition Chair*, CHI, 2013
- *General Chair*, Foundations of Digital Games, 2012

- *Program Co-Chair*, IEEE Conference on Computational Intelligence in Games, 2012
- *Workshop Co-Chair* for CHI on Game User Research, 2012
- *Workshop Co-Chair* for Foundations of Digital Games on Game User Research, 2012
- *White House Academic Consortium* on Games for Impact, 2012-2014
Task Force to develop leading vision for games scholarship and programs within the US. We met with several funding agencies and developed documents on the topic
- *ACM Representative for TC14 IFIP* on Entertainment Computing, 2012-Present
- *IEEE CIS Task Force* on Player Satisfaction Modeling (PSM), 2012-Present
- *Program and General Co-Chair*, Games User Research Summit, 2011
- *General Co-Chair*, ICEC (International Conference on Entertainment Computing), 2011
- *On Program Review Committee*, The Art Institute of Vancouver's Bachelor of Science in Game Programming, 2011
- *Area Chair*, Graphics Interface, 2011
- *Research Co-Chair*, Global Game Jam, 2010
- *AI Track Chair*, Foundations of Digital Games, 2010
- *Program Co-Chair*, Advanced Computer Entertainment (ACE), 2009
- *Advisory Committee*, Annual International Conference on Computer Gaming, Animation, Virtual reality and allied technology, 2008
- *Program Co-Chair*, AAAI Symposium on Artificial Intelligence and Interactive Entertainment, 2002
- *Finance Chair*, Foundations of Digital Games, 2009
- *Organization Chair*, Designing Interactive System (DIS), 2006

- *Editorial Board*, Associate Editor for, IEEE Transactions on Affective Computing, 2014-Present
- *Editorial Board*, Associate Editor for, Entertainment Computing (Elsevier), 2011-Present
- *Editorial Board*, Game Studies, the International Journal of Game Research, 2013-2014
- *Managing Editor*, IJART (International Journal of Art and Technology), 2009-2011
- *Editorial Board*, Associate Editor for, IEEE Transactions on Computational Intelligence and Artificial Intelligence in Games, 2009-2013
- *Editorial Board*, Associate Editor for, Journal of Game Development, 2006-2008
- *Editorial Board*, ACM Computers in Entertainment, 2003-Present

Committee Memberships

- *Program Committee*, FDG, 2021
- *Program Committee*, AIIDE, 2020
- *Program Committee*, Blue Sky Ideas, ICIDS, 2020
- *Program Committee*, Conference on Games, COG, 2019
- *Program Committee*, AI and Digital Interactive Entertainment, AIIDE, 2019
- *Program Committee*, Procedural Content Generation FDG Workshop, PCG, 2019
- *Program Committee*, Knowledge Extraction from Games (KEG), AAAI, 2018
- *Program Committee*, Artificial Intelligence and Interactive Digital Entertainment (AIIDE), 2018

- *Program Committee*, Artificial Intelligence and Interactive Digital Entertainment (AIIDE), Doctoral Consortium, 2018
- *Program Committee*, Foundations of Digital Games, 2010, 2014, 2017, 2018
- *Program Committee*, AIIDE Workshop on Research in Cognitive-based Approaches to Intelligent Interactive Digital Entertainment, 2014
- *Program Committee*, Play Data consortium (PDC), 2013
- *Program Committee*, ICIDS (Int'l Conf. on Interactive Digital Storytelling), 2008, 2009, 2010, 2013
- *Program Committee*, ICEC (Int'l Conf. on Entertainment Computing), 2013
- *Program Committee*, Autonomous Agents and Multi-Agent Systems (AAMAS), 2008, 2013
- *Program Committee*, Visual Information Communication, 2011
- *Program Committee*, Affective Computing and Intelligent Interaction (ACII), 2007, 2009, 2011
- *Program Committee*, IEEE Conf. on Computational Intelligence & Games (CIG), 2009, 2010, 2011
- *Program Committee*, Evaluating Player Experience Workshop at Foundations of Digital Games, 2011
- *Program Committee*, Intelligent Virtual Agents (IVA), 2009, 2011
- *Program Committee*, AI and Interactive Digital Entertainment (AIIDE), 2005, 2006, 2007, 2008, 2011
- *Program Committee*, FuturePlay, 2007, 2010
- *Program Committee*, PC Games, 2010
- *Program Committee*, Meaningful Play, 2010
- *Program Committee*, International Conference on Arts and Technology (ArtsIT), 2009
- *Program Committee*, Game and Entertainment Technologies, 2009
- *Program Committee*, Interactive Entertainment, 2008
- *Program Committee*, Gaming, 2008
- *Program Committee*, Symposium in Interactive 3D Graphics and Games (I3D), 2008
- *Program Committee*, 3rd International Conference on Web Information Systems and Technology, 2007
- *Program Committee*, Int'l Conf. on Intelligent Multimedia and Ambient Intelligence (IMAI), 2007
- *Program Committee*, AAAI Symposium on Intelligent Narrative Technologies, 2007
- *Program Committee*, 2nd Workshop on Narrative Learning Environments (NLE), 2007
- *Program Committee*, IEEE World Congress on Computational Intelligence, 2006
- *Program Committee*, Australian Workshop on Interactive Entertainment, 2005, 2006
- *Program Committee*, Digital Interactive Media Entertainment & Arts (DIME), 2006
- *Program Committee*, Eye Tracking Research and Application Symposium, 2006
- *Program Committee*, European Simulation and Modeling Conference, 2005
- *Program Committee*, AAAI Workshop on Modular Construction of Human-Like Intelligence, 2005
- *Program Committee*, Australian Workshop on Interactive Entertainment, 2004
- *Program Committee*, International Conference on Virtual Storytelling, 2003
- *Program Committee*, AAAI Symposium on Artificial Intelligence and Interactive Entertainment, 2001

Reviewer For

- Funding Agencies: Elevate Review Committee (ERC), MITACS, CFI Reviewer, Austrian Science Fund, NSF CHS, NSF CyberLearning, NSERC Strategic grants, Canada Foundation for Innovation

- Conferences and Journals: Fundamentals of Digital Games, Journal of Adaptive Behavior, Loading, Advances in Computer Entertainment, International Journal of Computer Games Technology, IEEE Computer Graphics and Applications, IEEE Transactions on Computational Intelligence and Artificial Intelligence, 17th Eurographics Symposium on Rendering, Transactions on Multimedia Computing Communications and Applications, Fuzz-IEEE, Journal of Educational Resources in Computing, International Joint Conference on Artificial Intelligence (IJCAI), IEEE Computers Graphics and Application, Special Issue on AI and Interactive Entertainment, 2006, ACM Conference on Human Factors in Computing Systems (CHI), The World Multiconference on Systemics, Cybernetics, and Informatics (SCI), International Conference on Virtual Storytelling, AAAI Symposium, Australian Workshop on Interactive Entertainment, AAAI Workshop on Modular Construction of Human-Like Intelligence, Euro-graphics, Journal of Interacting with Computers, 2006

TEACHING

Northeastern University

August 2011 - Present

Khoury College of Computer Sciences and CAMD

- CS 7340 PhD Level HCI Class: Theory and Methods in Human Computer Interaction
Fall 2019 (8 Students)
- GSND 6350 Data-Driven Player Modeling (4 students)
Fall 2019 (3 students)
- CS 7340 PhD Level HCI Class: Theory and Methods in Human Computer Interaction
Fall 2018 (30 Students)
- GSND 6350 Data-Driven Player Modeling (4 students)
Fall 2018 (4 students)
- CS 5150/4150 Game AI
Spring 2017 (40 students)
- GSND 6630 Game Analytics
Fall 2016 (6 students)
- CS 2510 Fundamentals of Computer Science II
Spring 2016 (34 students)
- GSND 6330 Game User Research
Spring 2016 (7 students)
- CS 4500 Software Development
Fall 2015 (49 Students), Spring 2015 (87 Students)
- CS 4100 Artificial Intelligence
Spring 2014 (13 Students), Spring 2013 (39 Students)
- CS 5100 Artificial Intelligence
Spring 2014 (31 Students), Spring 2013 (39 Students)
- GAME 3899: Topics Game User Research
Fall 2013 (4 Students)
I developed the curriculum for Game User Research, a new course and also one of the first examples of such courses in this new and growing area.
- GAME 3150: Game Design Algorithms
Fall 2012 (7 Students), Fall 2011 (11 students)
I developed the curriculum and delivered it. The curriculum was composed of several assignments allowing students to practice the concepts and apply them. It also includes a project to allow students to think beyond the specific simple assignments and also to work in a group to solve game design problems algorithmically.

- GAME 3899: Topics Game User Research
Fall 2013 (4 Students), Fall 2011 (11 students)
- CS 4300: Computer Graphics
Spring 2012 (30 Students)

Simon Fraser University

August 2007 - 2011

School of Interactive Arts and Technology

- IAT 410: Advanced Game Design
Spring 2011 (48 students), Fall 2007 (78 students)
I introduced game engines as part of the course to allow students to understand the game pipeline as well as produce 3D games. I developed new rubric for judging game quality using student critique and outside expert testing.
- IAT 312: Foundations of Game Design
Fall 2010 (86 students), Fall 2009 (72 students), Fall 2008 (74 students), Spring 2008 (49 students)
I used broken games as design challenges for students to apply design concepts in reviving the game. Specifically, developed and designed three bad games for three project assignments. These project assignments asked students to turn these bad non-fun games into fun games. Two of these games were software based: one is 2D developed in Flash and the other is 3D developed in Unreal Tournament 2007. The third one is a physical board game. These games have been designed through consultation with industry designers and have undergone several tests to ensure their non-fun nature and also ensure that they can be turned into more fun games in many different ways.
- DMED 503: Fundamentals of Game Design
Fall 2009 (28 students), Fall 2008 (21 students)
- IAT 309: Writing for Design, Media and Info
Fall 2009 (41 students)
Re-designed the course to work with 41 students. Included a group project on business proposal. This has shifted the focus of the writing to persuasive writing and argument development.
- IAT 842: Theory and Design of Games
Fall 2009 (3 students), Spring 2009 (9 students), Spring 2008 (5 students)

Penn State University

August 2003 - 2007

College of Information Science and Technology

- IST 577: Games and Learning
Spring 2007 (13 students)
- IST 466: Game Design and Development
Fall 2006 (29 students)
- IST 412: Design of Complex Software Systems
Fall 2006 (37 students), Fall 2004 (46 students), Fall 2003 (31 students)
- IST 594: Game Design Seminar
Fall 2006 (4 students)
- IST 411: Distributed Computing Systems
Spring 2006 (34 students), Spring 2005 (21 students), Spring 2004 (41 students)
- IST 497B: Virtual Worlds/Immersive Environments II
Spring 2006 (24 students), Fall 2005 (24 students)
I designed and developed the entire course in collaboration with Prof. Warren Wake from Art and Architecture. Developed half course lecture materials and a new design for the course that requires students to team up in large teams with a program manager who keeps track of the group members progress and reports back to the professor.

- IST 402: Design of Immersive 3D Environments
Spring 2005 (38 students), Spring 2004 (34 students)

PROGRAM DEVELOPMENT

University of California at Santa Cruz

July 2020 - Present

Computational Media

- Vice Chair of Serious Games
Reviewed the curriculum and program. Adjusted the program statement. Revised the courses. Proposed new course on modeling and simulation. Developed CLP with MJ (vice chair of Games and Playable Media).

Northeastern University

August 2011 - Present

Khoury College of Computer Sciences and CAMD

- MS in Artificial Intelligence
Worked with Stacy Marsella to develop a new Masters degree on the topic of AI. The masters program was just approved by the senate (2018).
- Game Design Program
In 2012, I led and developed a new entity at the university as a program and became the director of that program. The program housed around 13 faculty and we worked together to develop curricula and revise current ones to move Northeastern's ranking from unranked and unknown to top 25 schools in Game Design, Highest rank reached as 12 in 2016, the year I stepped down.
- MS in Game Science and Design
In collaboration with the game design faculty, developed the curriculum for a Masters of Science in Game Science and Design. I proposed it to the Graduate Council and approved it as a joint program between two colleges: College of Arts, Media and Design and College of Computer and Information Science.
- Combined Major Khoury College of Computer Sciences and Game Design
In collaboration with Richard Rasala, redeveloped the curriculum to enhance the technical content and allow for better technical depth which students need for their careers.

Pennsylvania State University and Simon Fraser University

August 2004 - 2011

- Games for Girls
In collaboration with my graduate students, Ibrahim Yucel and Joseph Zupko, as well as IST staff: Susan Lucas, Margaret Hopkins, Olivia Lewis, and Virginia Belser, who helped plan, advertise, cater, and manage the full set of three courses. We developed a program that was offered Fall 2005, Spring 2006, and Summer 2006. Andrea Tapia helped collect surveys to evaluate outcome of this initiative on the girls perception of IT and their self-efficacy. This has been subject of several conference and journal publications, as well as my magazine article, which is also used to promote IST and the program.

Other

- Game Camp Curriculum
This Curriculum has been used for several game camps: TMDM (Tomorrows Masters of Digital Media) Summer 2008, Mexico Game Camps Spring 2010, Inner-city Survey middle school, and LCAD Game Camp in LA Summer 2011.
In the Spring 2010, I conducted three 10-session workshops for youths aged 10-19 on game development in Mexico. The main aim of the workshop is to develop students problem solving skills, career development and goal setting as well as programming and art skills through the process of developing their own games.
In the summer 2008, I conducted a 3-week workshop for Teens as part of the Tomorrows Masters of Digital Media Program at Great Northernway Campus. During this workshop, I worked with Patrick Pennefather, a theatre improviser. In collaboration, we developed a new curriculum that uses improvisational theatre techniques to enhance team work and group communication. This technique and Mr.

Pennefathers outlook on characters and personality allowed me to learn many valuable lessons on personality and group composition and how to work with such differences in the classroom. In December 2009-30 June 2010 we conducted a workshop with inner city middle school. The city center area from which participants were drawn is ethnically diverse, with strong Aboriginal and South Eastern Asian immigrant population. The area is historically low-income working class. We conducted the workshops in the school with great success. Games was shown to be a great vehicle to engage autistic and special needs students as well as other students.

INTERNAL SERVICE

Northeastern University Internal Service

2020-2021 Undergraduate Committee (Computational Media)

2020-2021 Faculty mentor for Zouheir Rezki

2020-2021 Vice Chair of Serious Games Program

Northeastern University Internal Service

2019-2020 Chair of AI+X Hiring Committee (Khoury College of Computer Sciences)

2019-2020 Hiring Committee (Khoury College of Computer Sciences)

2019-2020 PhD Committee (Khoury College of Computer Sciences)

2019-2020 Merit Committee (Khoury College of Computer Sciences)

2015-2020 Tenure and Promotion (Khoury College of Computer Sciences)

2018-2019 Chair of Diversity Committee (CAMD)

2015-2018 Graduate Committee (Khoury College of Computer Sciences)

2013-2015 Game Design Director (CAMD)

2013-2015 Game Educational and Research Program Director (CCIS & CAMD)

2014-2015 Provost Search Committee

2013-2013 RPOC, Senate Committee

2011-2015 Tenure and Promotion in Arts and Design Department (CAMD)

2013-2014 Research Leadership Development Initiative Program

2012-2014 Dean Search Committee (CCIS)

2012-2013 Ad hoc Game Masters Committee (Chair, CCIS & CAMD)

2011-2013 Undergraduate Curriculum Committee (CCIS)

2013-2014 Review and revise undergraduate curriculum, Game Design

2012-2013 Ad hoc Game Masters Committee (Chair, CCIS & CAMD)

2012-2013 Ad hoc Game and IM Undergraduate Committee (Chair, CCIS & CAMD)

2012-2013 Ad hoc Game Communication Committee (CCIS & CAMD)

2012-2013 Masters Committee (Khoury College of Computer Sciences)

2011-2012 Interdisciplinary Game Design Search Committee (Chair, CCIS & CAMD)

2011-2011 Three year review in Theatre (CAMD)

Simon Fraser University Internal Service

2011-2011 Graduate Admissions Committee

2011-2011 Undergraduate Curriculum Committee

2011-2011 Curriculum Review Committee

2007-2010 Graduate Program Committee

2008-2010 Promotion and Tenure Committee

2008-2010 Cinema+ Graduate Program Committee

2007-2009 Graduate Admissions Committee

Penn State University Service

2005-2007	Scholarship Committee
2004-2007	Software Committee
2006-2007	Distinguished Lecture Series
2005-2006	Outreach Committee
2004-2006	Faculty Search Committee
2004-2005	Panel on Option (panelist)
2006	Open House Panelist
2004-2005	What we value Committee
2003-2004	Curriculum Committee