Michael Nixon

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EDUCATION

Simon Fraser University, School of Interactive Arts & Technology　　Surrey, BC
Ph.D., Dec 2017
- Dissertation: "Investigating the Role of Social Eye Gaze in Designing Believable Virtual Characters."
Senior supervisor: Steve DiPaola.

Simon Fraser University, School of Interactive Arts & Technology　　Surrey, BC
M.Sc., Dec 2009
- Thesis: "Enhancing Believability: Evaluating the Application of Delsarte's Aesthetic System to the Design of Virtual Humans." Senior supervisor: Magy Seif El-Nasr.

Vancouver Island University　　Nanaimo, BC
Diploma, Digital Media Technology, 2006.

Vancouver Island University　　Nanaimo, BC
Bachelor of Science, Computer Science, 2004.

PUBLICATIONS & PRESENTATIONS

Books
1. Turner, J., Nixon, M., Bernardet, U., & DiPaola, S. (Eds.). (2016). Integrating Cognitive Architectures into Virtual Character Design. Hershey, PA: IGI Global. Retrieved from http://www.igi-global.com/book/integrating-cognitive-architectures-into-virtual/146983.
2. Tanenbaum, J., Seif El-Nasr, M., & Nixon, M. (Eds.). (2014). Nonverbal Communication in Virtual Worlds: Understanding and Designing Expressive Characters. Pittsburg, PA: ETC Press. Retrieved from http://repository.cmu.edu/etcpress/14/.

Conference Proceedings
1. Bernardet, U., Adhia, D., Jaffe, N., Wang, J., Nixon, M., Alemi, O., … Schiphorst, T. (2016). M+M: A Novel Middleware for Distributed, Movement Based Interactive Multimedia Systems. In *Proceedings of the 3rd International Symposium on Movement and Computing* (pp. 21:1–21:9). New York, NY, USA: ACM. http://doi.org/10.1145/2948910.2948942
2. Nixon, M, Bizzocchi, J. (2013). Press X for Meaning: Interaction Leads to Identification in Heavy Rain. Proceedings of Digital Games Research Association Conference (DiGRA), Atlanta, Georgia, online: http://www.digra.org/digital-library/publications/press-x-for-meaning-interaction-leads-to-identification-in-heavy-rain/. 14pp.
3. Bizzocchi, J, Nixon, M, DiPaola, S, & Funk, N. (2013). The Role of Micronarrative in the Design and Experience of Digital Games. Proceedings of Digital Games Research Association Conference (DiGRA), Atlanta, Georgia, online: http://www.digra.org/digital-library/publications/the-role-of-micronarrative-in-the-design-and-experience-of-digital-games/. 16pp.
4. Nixon, M., Pasquier, P., & Seif El-Nasr, M. (2010). DelsArtMap: Applying Delsarte's Aesthetic System to Virtual Agents. In Lecture Notes in Computer Science (Vol. 6356, pp. 139-145). Presented at 10th International Conference on Intelligent Virtual Agents, Philadelphia: Springer.

Peer-reviewed Journal Articles

1. Shakeri, H., Nixon, M., & DiPaola, S. (2017). Saliency-Based Artistic Abstraction With Deep Learning and Regression Trees. *Journal of Imaging Science and Technology*, *61*(5).
2. Turner, J. O., Pasquier, P., & Nixon, M. (2014). Qiezli – A "Self-Absorbed" Creative Virtual Agent in Second Life. Metaverse Creativity, 4(1), 55–74.
3. Nixon, M., & Bizzocchi, J. (2014). Interaction Images promote Character Identification in Heavy Rain. *Well Played Journal*, *3*(1), 43–64.

Book Chapters

1. Davies, R., & Nixon, M. (2016). Digitisation Fundamentals. In R. Siemens, R. Lane, & C. Crompton (Eds.), Doing Digital Humanities: Practice, Training and Research (163-176). London, UK: Routledge. (Invited)
2. Turner, J., Nixon, M., Bernardet, U., & DiPaola, S. (Eds.). (2016). Conclusion. In Integrating Cognitive Architectures into Virtual Character Design (pp. 294–304). Hershey, PA: IGI Global.
3. Turner, J. O., Nixon, M., & Bizzocchi, J. (2015). SL-Bots: Automated and Autonomous Performance in Second Life. In D. Doyle (Ed.), *New Opportunities for Artistic Practice in Virtual Worlds*. (pp. 263-289). Hershey, PA: IGI Global. (Editor reviewed)
4. Tanenbaum, J., Nixon, M., & Seif El-Nasr, M. (2014a). Basics of Nonverbal Communication in the Physical World. In J. Tanenbaum, M. Seif El-Nasr, & M. Nixon (Eds.), Nonverbal Communication in Virtual Worlds (pp. 10–26). Pittsburg, PA: ETC Press.
5. Tanenbaum, J., Nixon, M., & Seif El-Nasr, M. (2014b). Basics of Nonverbal Communication in the Virtual World. In J. Tanenbaum, M. Seif El-Nasr, & M. Nixon (Eds.), Nonverbal Communication in Virtual Worlds (pp. 27–37). Pittsburg, PA: ETC Press.
6. Tanenbaum, J., Seif El-Nasr, M., & Nixon, M. (2014). Challenges and Opportunities for the Ongoing Study of Nonverbal Communication in Virtual Worlds. In J. Tanenbaum, M. Seif El-Nasr, & M. Nixon (Eds.), Nonverbal Communication in Virtual Worlds (pp. 319–326). Pittsburg, PA: ETC Press.
7. Seif El-Nasr, M., Bishko, L., Zammitto, V., Nixon, M., Vasiliakos, A. V., & Wei, H. (2009). Believable Characters. In B. Furht (Ed.), Handbook of Multimedia for Digital Entertainment and Arts (pp. 497–528). New York, NY: Springer US. (Editor reviewed)

Conference Presentations and Posters

1. Nixon, M., & DiPaola, S. (2017). The Hybrid Nature of User Interface in the Facilitation of Social Relationships & Nonverbal Behaviour as Game Mechanics. Presented at the Canadian Game Studies Association 2017, Toronto, Canada. (Refereed Abstract Submission)
2. Lari, A., Desai, N., Zhao, R., Church, M., Miller, R., Schmitt, J., Graves, E., Szafron, D., Carbanaro, M., Schaeffer, J., Seif El-Nasr, M., Nixon, M., Mould, D., Erdeg, A. (2012). BELIEVE: Believable Characters and Stories in Video Games. Poster: GRAND Annual Conference 2012.
3. DiPaola, S., Nixon, M., Bizzocchi, J., & Funk, N. (June 2013). Driving Emotional Involvement in Sports Games: a Case Study in Knowledge-Based Procedural Cinematography. Presented at the Canadian Game Studies Association 2013, Victoria, BC. (Refereed Abstract Submission)
4. Soules, M., & Nixon, M. (2008). The Image Dialogue: Agile Computing and Social Commentary. Presented at SDH/SEMI 2008, University of British Columbia.
5. Soules, M., & Nixon, M. (2004). The Juxtaposition Engine: Recombinant Images and Emerging Narratives. Presented at COCH/COSH 2004, University of Manitoba.

Artistic Exhibitions and Demonstrations
1. <<datastream>> photography and digital art installation. Curator: Robin Field. Nanaimo Art Gallery. May 18 – 31, 2004.

WORK EXPERIENCE

School of Interactive Arts & Technology, Simon Fraser University Surrey, BC
Term Lecturer 2017 – 2018

School of Interactive Arts & Technology, Simon Fraser University Surrey, BC
Sessional Instructor 2013 – 2017

School of Interactive Arts & Technology, Simon Fraser University Surrey, BC
Term Lecturer 2014 – 2015

School of Interactive Arts & Technology, Simon Fraser University Surrey, BC
Research Assistant 2008, 2010 – 2014

Institute for Creative Technologies, USC CA, USA
Visiting Researcher Summer 2011

School of Interactive Arts & Technology, Simon Fraser University Surrey, BC
Teaching Assistant 2009 – 2015, 2017

Digital Media department, Vancouver Island University Nanaimo, BC
Instructor 2007 – 2009

Digital Humanities Summer Institute, University of Victoria Victoria, BC
Instructor 2004, 2009 – 2015

Bravenet Web Services Parksville, BC
Software Developer 2006 – 2007

Internet Shakespeare Editions, University of Victoria Victoria, BC
Research Assistant 2004

Centre for Digital Humanities Innovation, Vancouver Island University Nanaimo, BC
Research Assistant 2003 – 2004

RESEARCH EXPERIENCE

Movement & Meaning Middleware Project/Moving Stories SFU
Programmer 2014 – 2015
Developed a relational database of movement and interpretative annotations, as well as a web application that coordinates access

Attention Cuing Processes to Enhance Emotional Character Engagement in Video Games (NSERC Engage) SFU
Research Assistant 2012 – 2013

In collaboration with CBC TV Producer and EA developers, produced a validated framework to improve procedural cameras and characterization of virtual hockey players in Electronic Arts' NHL games.

Graphics, Animation and New Media (GRAND) NCE: Believable Characters and Stories for Games and Simulations   SFU
Research Assistant   2012
Investigated the capability of the Kinect device and development kit for creating environments to support improv scenarios.

Graphics, Animation and New Media (GRAND) NCE: Believable Characters and Stories for Games and Simulations   SFU
Research Assistant   2011
Investigated the connection between character nonverbal behaviour and social status in virtual worlds.

Virtual Environment Real User Study (VERUS): Social Signaling in Virtual Worlds   SFU
Research Assistant   2010 − 2011
Developed scripts for longitudinal behaviour tracking research within the Second Life virtual environment. Performed data collection and analysis for user studies.

Creativity Assistive Tools for Games (CAT Games): Gestural and Embodied Game Interfaces Group   SFU
Research Assistant   2008
Developed game character algorithms for controlling action and aesthetic display.

Canada-Cuba image dialogue: social commentary in the public sphere   VIU
Research Assistant / Programmer   2008
Developed an interactive web application called the image dialogue.

Internet Shakespeare Editions   VIU
Research Assistant   2004
Produced XSLT files and supporting scripts for web-based digital versions of Shakespeare.

TEACHING EXPERIENCE

SFU, SIAT – Sessional Instructor & Lecturer (2013 − 2018)
IAT 103W – Design Communication and Collaboration
IAT 206W – Media Across Cultures
IAT 210 – Introduction to Game Studies
IAT 309W – Writing Methods for Research
IAT 312 – Foundations of Game Design
IAT 313 – Narrative & New Media
IAT 334 – Interface Design
IAT 343 – Animation
IAT 351 – Advanced Human-Computer Interaction
IAT 432 – Design Evaluation

SFU, SIAT – Teaching Assistant (2009 − 2017)
IAT 103W – Design Communication & Collaboration
IAT 167 – Digital Games: Mechanics, Design and Programming

IAT 309W – Writing for Design, Media & Informatics
IAT 312 – Foundations of Game Design
IAT 313 – Narrative & New Media
IAT 404-405 – "Capstone" Project Development
IAT 432 – Design Evaluation

VIU, Digital Media – Instructor (2007 – 2009)
IPRO 240 – Internet Scripting I
IPRO 245 – Core Internet Technologies
IPRO 246 – Internet Applications Development
IPRO 290 – Internet Project Development

SCHOLARSHIPS & AWARDS

Franklin D. & Helen K. Van Pykstra Graduate Scholarship ($3000)	Spring 2017
Robar Industries Limited Graduate Scholarship ($700)	Spring 2015
President's PhD Scholarship ($6250)	Spring 2014
Westak International Sales, Inc. Graduate Scholarship ($700)	Spring 2012
Dean of Graduate Studies – Graduate Fellowship ($6250)	2008, 2010, 2011, 2012, 2014
Robert, Edwin, Richard, and Elisabeth Eppich Graduate Scholarship ($700)	Spring 2011

AFFILIATIONS & MEMBERSHIPS

Canadian Game Studies Association (CGSA)	2013 – 2014, 2017
Digital Games Research Association (DiGRA)	2013 – 2014
President, SIAT Graduate Student Association	May 2011 – Spring 2015
PhD Rep., SIAT Graduate Program Committee	May 2011 – Aug 2012, 2014
Steward, SFU Teaching & Support Staff Union	May 2011 – May 2017
Vice-President, SIAT Graduate Student Association	2010 – 2011, Spring 2015 – Summer 2015