Tony Morelli
tony@tonymorelli.com
401 S Elizabeth St
Mt Pleasant, MI 48858
(775) 232 - 3711

EDUCATION

PhD Computer Science and Engineering   December 2011
  University Of Nevada - Reno
  Dissertation – Non-Visual Natural User Interfaces

Master of Science Computer Engineering   May 2007
  University Of Nevada - Reno
  Topic - Game Teleporter: A Development Tool For Everyone

Bachelor of Science Electrical Engineering   May 1999
  Purdue University
  Senior Project - Interactive Storybooks for Children with Motor Impairments

WORK EXPERIENCE

Central Michigan University   9/2013 – Present
  Position – Associate Professor (2016-)
  Position – Assistant Professor (2013-2016)
  Responsibilities – Instruct and prepare students for bright futures in the field of Computer Science. Perform research on games and accessibility.

Acres 4.0/Oog Oog Productions   11/2011 – 4/2012
  Position – Game Engineer
  Responsibilities - Develop new technologies for casino marketing and Pulltab gaming markets. Supervise a team of developers, mathematicians, and QA engineers while designing and implementing client software packages.

Bally Technologies   7/1999 – 11/2011
  Position - Platform Architect
  Responsibilities - Develop new technologies for Class 2 and Lottery gaming markets
  Other Positions Held - System Engineer, Firmware Engineer, Senior Firmware Engineer

TEACHING

Central Michigan University Assistant Professor Computer Science   9/2013 - Present
    Average Overall Teaching Effectiveness (Student Opinion Surveys)   3.93/4.0
    28 Independent Studies Supervised
    1 Masters Thesis Supervised

  Courses Taught:
    ITC 383 - Intro to Game Development   Spring 2016
    CPS 396A – Human Computer Interaction   Spring 2016
    CPS 482 - Advanced Multimedia   Fall 2016

CPS 480 - Artificial Intelligence	Fall 2016
CPS 210 - Assembly Lang and Computer Org	Fall 2016
MMD 495 - Multimedia Design Minor Capstone	Fall 2016
ITC 383 - Intro to Game Development	Spring 2016
CPS 482 - Advanced Multimedia	Fall 2015
CPS 480 - Artificial Intelligence	Fall 2015
ITC 383 - Intro to Game Development	Fall 2015
CPS 210 - Assembly Lang and Computer Org (2)	Fall 2015
CPS 482 - Advanced Multimedia	Spring 2015
ITC 383 - Intro to Game Development	Spring 2015
ITC 383 - Intro to Game Development (2)	Fall 2014
CPS 181 – Data Structures	Spring 2014
ITC 383 - Intro to Game Development	Fall 2013

University of Nevada, Reno   9/2012 - 12/2012
    CPE 491/691 - Introduction to Gaming and Slot Machine Development   Fall 2012

Truckee Meadows Community College   9/2007 - 12/2008
    CIT198B - Introduction To Game Programming   Fall 2008
    CS202 - Introduction to C++ Programming   Spring 2008
    CS202 - Introduction to C++ Programming   Fall 2007

SERVICE
 Department

Maintain Department Linked In Group	Spring 2017
Undergraduate Student Advisor	Spring 2017
Curriculum Committee	Spring 2017
Hiring Committee	Spring 2017
Maintain Department Linked In Group	Fall 2016
Undergraduate Student Advisor	Fall 2016
Curriculum Committee	Fall 2016
Hiring Committee	Fall 2016
Maintain Department Linked In Group	Spring 2016
Undergraduate Student Advisor	Spring 2016
Curriculum Committee	Spring 2016
Created / Maintain Department Linked In Group	Fall 2015
Undergraduate Student Advisor	Fall 2015
Curriculum Committee	Fall 2015
IGDA Academic Site - Founder Central Michigan University	Spring 2015
Curriculum Committee	Spring 2015
Undergraduate Student Advisor	Spring 2015
Curriculum Committee	Fall 2014
Undergraduate Student Advisor	Fall 2014
Undergraduate Student Advisor	Spring 2014
Curriculum Committee	Spring 2014
Undergraduate Student Advisor	Fall 2013
Curriculum Committee	Fall 2013

College
College of Science and Technology Web Communications Committee	Spring 2017
College of Science and Technology Web Communications Committee	Fall 2016
College of Science and Technology Web Communications Committee	Spring 2016
100 Girls of Code	Fall 2015
STEM Day	Fall 2015
College of Science and Technology Web Communications Committee	Fall 2015
Women in Technology Invited Speaker	Spring 2015
College of Science and Technology Web Communications Committee	Spring 2015
College of Science and Technology Web Communications Committee	Fall 2014
CMU and You Day	Fall 2014
Women in Technology Invited Speaker	Spring 2014
CMU and You Day	Fall 2013

University
Faculty Learning Commission – CMU Gaming Guild (Co-Facilitator)	Spring 2017
Animation Tenure Track Professor Search Committee Member	Spring 2017
Multimedia Design Production Technology Council Secretary	Spring 2017
Academic Senate Computer Science Representative	Spring 2017
Faculty Advisor Game Development and Design Club RSO	Spring 2017
Faculty Advisor CMU League of Legends RSO	Spring 2017
Faculty Advisor Mt Pleasant Trainers Club RSO	Spring 2017
Faculty Advisor CMU Smash Club RSO	Spring 2017
Faculty Advisor Computer Science Research and Graduate School Prep Club RSO	Spring 2017
Undergraduate Curriculum Committee	Spring 2017
General Education Committee	Spring 2017
Faculty Learning Commission – CMU Gaming Guild (Co-Facilitator)	Fall 2016
Animation Tenure Track Professor Search Committee Member	Fall 2016
Multimedia Design Production Technology Council Secretary	Fall 2016
Academic Senate Computer Science Representative	Fall 2016
Faculty Advisor Game Development and Design Club RSO	Fall 2016
Faculty Advisor CMU League of Legends RSO	Fall 2016
Faculty Advisor Mt Pleasant Trainers Club RSO	Fall 2016
Faculty Advisor CMU Smash Club RSO	Fall 2016
Faculty Advisor Computer Science Research and Graduate School Prep Club RSO	Fall 2016
Undergraduate Curriculum Committee	Fall 2016
General Education Committee	Fall 2016
Faculty Learning Commission – CMU Gaming Guild	Spring 2016
Animation Tenure Track Professor Search Committee Member	Spring 2016
Multimedia Design Production Technology Council Secretary	Spring 2016
Academic Senate Computer Science Representative	Spring 2016
Faculty Advisor Game Development and Design Club RSO	Spring 2016
Faculty Advisor CMU League of Legends RSO	Spring 2016
Faculty Advisor Mt Pleasant Trainers Club RSO	Spring 2016
Faculty Advisor CMU Smash Club RSO	Spring 2016
Faculty Advisor Computer Science Research and Graduate School Prep Club RSO	Spring 2016
Undergraduate Curriculum Committee	Fall 2015
Faculty Learning Commission – CMU Gaming Guild	Fall 2015
Animation Tenure Track Professor Search Committee Member	Fall 2015

Multimedia Design Production Technology Council Secretary	Fall 2015
Academic Senate Computer Science Representative	Fall 2015
Faculty Advisor Game Development and Design Club RSO	Fall 2015
Faculty Advisor CMU League of Legends RSO	Fall 2015
Faculty Advisor Mt Pleasant Trainers Club RSO	Fall 2015
Faculty Advisor/Creator CMU Smash Club RSO	Fall 2015
Faculty Advisor/Creator Computer Science Research and Graduate School Prep Club RSO	Fall 2015
Faculty Advisor/Creator Mt Pleasant Trainers Club RSO	Spring 2015
Faculty Advisor/Creator CMU League of Legends RSO	Spring 2015
Faculty Advisor Game Development and Design Club RSO	Spring 2015
Multimedia Design Production Technology Council Secretary	Spring 2015
Academic Senate Computer Science Representative	Spring 2015
Multimedia Design Production Technology Council Secretary	Fall 2014
Faculty Advisor/Creator Game Development and Design Club RSO	Fall 2014

SCHOLARLY ACTIVITIES

Journal Publications

(J6) **Orientation Based Accelerometer Analysis (OBAA) for Mobile Gestures: Memorable Authentication.** Andrew Holland and Tony Morelli. GSTF Journal on Computing (JoC). January 2017, Vol 5 No 2. pp 53-57.

(J5) **Analysis of Player Preference in Networked Audio Games**. Kevin Andrews, Michael Forzano, and Tony Morelli. Journal on Technology and Persons with Disabilities. pp 79-90. 2016 California State University, Northridge.

(J4) **In-Game Minecraft Quests for Elementary Education**. Jonathon Kissinger and Tony Morelli. International Journal for Innovation Education and Research 3.8 (2015).

(J3) **Ouya: The Launch of a New Video Game Paradigm**. Jonathon Kissinger and Tony Morelli. Journal of Computing Vol 3 No 4, Pages 48-54, July 2014.

(J2) **Real-time Sensory Substitution to Enable Players who are Blind to Play Video games using Whole Body Gestures**, Tony Morelli and Eelke Folmer. Entertainment Computing, 5(1) Pages 83 – 90, 2013.

(J1) **Improving the lives of youth with VI through exergames**. Tony Morelli, John Foley, Lauren Lieberman, and Eelke Folmer. INSIGHT: Research and Practice in Visual Impairment and Blindness, Volume 4, Number 4, Pages 160-170 Fall 2011. Allen Press.

Conference Publications

(C25) **Virtual to Functional Reality - Using Virtual Reality to Teach Individuals With Intellectual Disability Real World Skills**. Tony Morelli, Jordan Shurr, Angie Jasper, Meagan McCollow, Molly Rossman, and Ethan Coggins. Proceedings of Meaningful Play 2016. East Lansing, MI.

(C24) **Augmented Personal Experience – Run Time Video Game Accessibility.** Taylor Ripke and Tony Morelli. Proceedings of Meaningful Play 2016. East Lansing, MI.

(C23) **Virtual Reality Navigation Simulation for Users Who are Blind**. Tony Morelli, Ethan

Coggins, Ethan Coggins, Kevin Andrews, Kumar Yelamarthi and Ahmed Abdelgawad. Proceedings of IEEE 59th International Midwest Symposium on Circuits and Systems (MWSCAS 2016). Abu Dhabi, UAE.

(C22) **A Four-Layer Wireless Sensor Network Framework for IoT Applications**. Kevin Laubhan, Khaled Talaat, Sarah Riehl, Tony Morelli, Ahmed Abdelgawad and Kumar Yelamarthi. Proceedings of IEEE 59th International Midwest Symposium on Circuits and Systems (MWSCAS 2016). Abu Dhabi, UAE.

(C21) **Analysis of Game Console Accessibility for Users who are Blind**. Tony Morelli, Kevin Andrews, and Taylor Ripke. To Appear. Proceedings of DiGRA/FDG 2016. Dundee, Scotland.

(C20) **Haptic Relay - Including haptic feedback in online video game streams**. Tony Morelli. Proceedings of HCII 2016. HCI International. Toronto, ON Canada. August 2016.

(C19) **Using Virtual Reality to Enhance Vision for People Who Are Blind in One Eye**. Tony Morelli and Michael Ostrander. Proceedings of HCII 2016. HCI International. Toronto, ON Canada. August 2016.

(C18) **Back-Pointer - Fitts' Law analysis of natural mobile camera based interactions.** Tony Morelli and Taylor Ripke. IEEE-GEM Games Entertainment and Media Conference. Toronto, ON. October 14-16, 2015.

(C17) **Presenting a Standard Slot Machine as an Interactive Racing Game.** Tony Morelli. IEEE-GEM Games Entertainment and Media Conference. Toronto, ON. October 14-16, 2015.

(C16) **Usability of Touchpad Based Game Controller Interfaces.** Jonathon Kissinger and Tony Morelli. Proceedings of HCII 2015. HCI International. Los Angeles, California. August 2015.

(C15) **Usability of Back of Device Virtual Buttons.** Tony Morelli, Ethan Coggins, and Molly Rossman. Proceedings of Foundations of Digital Games 2015.

(C14) **Towards More Accurate Open Source Kart Race Balancing.** Tony Morelli. IEEE-GEM Games Entertainment and Media Conference – October 22-24, 2014.

(C13) **Introduction to Slot Machine Development: A Course For CS Majors.** Tony Morelli. Proceedings of Foundations of Digital Games – April 2014.

(C12) **An Exergame to Improve Balance in Children Who Are Blind**, Tony Morelli, John Foley, Lauren Lieberman, and Eelke Folmer. Proceedings of Foundations of Digital Games - April 2014.

(C11) **Video Game Industry as a Complex Network**, Tony Morelli and Mehmet Hadi Gunes, 2nd Workshop on Social Network Analysis in Applications (SNAA 2012), Istanbul, Turkey, Pages
1183-1188. 8/26/2012

(C10) **TwuiST: A Discrete Tactile-Proprioceptive Display for Eye and Ear Free Output on**

Mobile Devices, Tony Morelli and Eelke Folmer, Proceedings of IEEE Haptics Symposium 2012, Pages 443-450, Vancouver, Canada March 2012

(C9) **Spatial Gestures using a Tactile-Proprioceptive Display**. Eelke Folmer and Tony Morelli, In Proceedings of Tangible Embodied Interaction 2012. Pages 139-143, Kingston, Canada. February 2012

(C8) **Real-time Sensory Substitution to Enable Players who are Blind to Play Gesture based Video Games**. Tony Morelli and Eelke Folmer. Proceedings of Foundations of Digital Interactive Games, Pages 147-153, Bordeaux France, June 2011.

(C7) **Pet-N-Punch: Upper Body Tactile/Audio Exergame to Engage Children with Visual Impairments into Physical Activity.** Tony Morelli, John Foley, Lauren Lieberman and Eelke Folmer. Proceedings of Graphics Interface. Pages 223-230, St John Newfoundland. May 2011.

(C6) **VI-Bowling: Tactile/Audio Motor Learning Exergame for Users who are Visually Impaired**. Tony Morelli, Eelke Folmer. In proceedings of the 12th international ACM SIGACCESS conference on Computers and Accessibility. Pages 179-186, Orlando, Florida, October 2010

(C5) **VI-Tennis: a Vibrotactile/Audio Exergame for Players who are Visually Impaired**. Tony Morelli, John Foley, Luis Columna, Lauren Lieberman, Eelke Folmer. Proceedings of ACM Foundations of Digital Interactive Games 2010. Pages 147-154, Monterey, California. June 2010.

(C4) **Comparison Of Vibrotactile/Audio And Audio Cues While Playing An Exergame For Users Who Are Blind**. John Foley, Eelke Folmer, Tony Morelli, Meghan Morningstar, Nicole Corcoran, Lauren Lieberman. 57th Annual Meeting and inaugural World Congress on Exercise is Medicine of the American College of Sports Medicine 2010

(C3) **Haptic/audio based exergaming for visually impaired individuals**. Anthony Morelli. ACM SIGACCESS Accessibility and Computing Issue 96 (January 2010) Pages: 50-53

(C2) **Game Teleporter: A Development Tool For Everyone**. Anthony Morelli, Dwight Egbert. Frontiers in Education 2007

(C1) **Finding attack strategies for predator swarms using genetic algorithms**. Ryan Leigh, Tony Morelli, Sushil Louis, Monica Nicolescu, Chris Miles. Congress on Evolutionary Computation 2005

Invited Conference Talks
Free, Online Accessible Exergames To Get Students Moving. Gayle Underwood and Tony Morelli. MCEC 2015. 75th Annual Conference Michigan Council for Exceptional Children. Grand Rapids, MI. March 2015.

Peer Reviewed Game Demos
(G6) **VR-Rades**, Tony Morelli and Molly Rossman. Meaningful Play 2016. East Lansing, MI.

(G6) **Rangers Vs Planners**, Tony Morelli and Joe Packer. Meaningful Play 2016. East Lansing, MI.

(G5) **Mountain VR**, Cuyler Quint and Tony Morelli. Meaningful Play 2016. East Lansing, MI.

(G4) **Face Race**, Tony Morelli. IEEE-GEM 2015. Toronto, ON.

(G3) **SonicWalker**, Tony Morelli, Ethan Coggins, and Molly Rossman. Foundations of Digital
Games - June 2015.

(G2)**Balance Coin**, Tony Morelli and John Foley. International Academic Conference on Meaningful
Play. October 16-18, 2014

(G1)**VI-SKI**, Tony Morelli, John Foley, Lauren Lieberman, and Eelke Folmer. Foundations of Digital
Games - April 2014.

Conference Posters
(P3) **Exergames: Developing Sensory Substitution Utilizing Enhanced Auditory and Vibrotactile
Cues.** Tyalor Ripke and Tony Morelli. 2016 ASEE NCS Conference.

(P2) **Gesture Based Authentication.** Andrew Holland and Tony Morelli. 2016 ASEE NCS
Conference.

(P1) **V2FR: Practical skills via virtual reality for students with significant disabilities**. Andrea
Jasper, Meagan McCollow, Jordan Shurr and Tony Morelli. Council for Exceptional Children
(CEC) 2016 Convention and Expo. St Louis, MO. April 13-16 2016.

Workshops
(W2) **The Power of Game Based Learning.** Elizabeth VanDeusen Macleod, Kristina Rouech, Katie
Reck, Georgios (George) Perdikakis, Daria Kluver, Tony Morelli, Wendy Robertson, and
Jonathon Truitt. 2016 Great Lakes Conference on Teaching and Learning. May 9-11 2016. Mt
Pleasant, MI.

(W1) **Whole body Exergaming for users who are Visually Impaired Impaired.** Tony Morelli,
Eelke Folmer. ACM CHI 2010

Patents
Electronic Wagering. John F. Acres, Warren White, Mark Dailey, Dale Hermanson, Tony
Morelli, Alex White, Cyrus Luciano, John Schmitz, Andrew King. US Patent
20140080564Al. Filed Sept 17, 2012. Published March 20, 2014.

**System and Methods for Automatically Creating a Composite Image from a Plurality of
Images.** Harold Wildey, Anthony Morelli, Ryan Soulard. US Patent 62/171,421. Filed
June 5, 2016.

PEER REVIEWS
CHI 2015 – Reviewed 1 Paper
IEEE-GEM 2015 – Reviewed 5 Papers
TEI 2015 – Reviewed 2 Papers
CHIPlay 2014 – Reviewed 3 Papers

ASSETS 2014 – Reviewed 2 Papers

CLOSED BETAS
     Teubor
     Overwatch
     Doom
     SMITE Xbox One
     Street Fighter 5
     SlingTV
     Halo 5
     Destiny
     Project Spark

AWARDS

2011 University of Nevada Outstanding Graduate Dissertation	5/2012
Non-Visual Natural User Interfaces	
2010 da Vinci Award Finalist	9/2010
VI Fit	
Truckee Meadows Community College	5/2008
Excellence In Teaching - Computer Technologies	

ACTIVITIES

Central Michigan University	9/2013-
Events Organized –	
Global Game Jam (USA Regional Organizer)	Spring 2017
ExtravaGAMEza V	Fall 2016
CMU/General Motors Hackathon	Fall 2016
Extra-Life	Fall 2016
Global Game Jam	Spring 2016
ExtravaGAMEza IV	Spring 2016
Relay for Life (40 Years of games in 40 Hours)	Spring 2016
ExtravaGAMEza III	Fall 2015
Extra-Life	Fall 2015
Mid-Term Tourneys	Fall 2015
ExtravaGAMEza II	Spring 2015
Global Game Jam	Spring 2015
ExtravaGAMEza	Fall 2014
Brawl at the Bovee	Fall 2014
University of Nevada, Reno	9/2009-5/2011
Senior Projects Advisor – VI Fit	
Toastmasters International	8/2008-1/2013
Officer - Sierra Sunrise Vice President of Membership	1/2012-1/2013
Officer - Sierra Sunrise Secretary	1/2011-1/2012
Officer - Sierra Sunrise Treasurer	1/2010-1/2011
Officer - Sierra Sunrise Sergeant At Arms	5/2009-12/2009

Art Shows

Art Walk Central 2016 – *A thousand sounds are worth a picture*   9/2016
    Temporal Audio Representation of Island Park
Art Walk Central 2015 – *The Many Faces of Agoglia*   9/2015
    Digital Collage of Face Swapped Timothy Carey