Nathan R. Prestopnik

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Professional Profile

I am a VR designer, digital artist, and human-computer interaction (HCI) researcher with nearly 20 years of experience in user experience design and interactive media development.

Academic Appointments

Professor (career contract), Virtual Reality Design | *May 2024 – Present*Division of Applied Technology, College of Arts and Sciences, Shenandoah University, Winchester, VA

Director, Virtual Reality Design, BA Program | Sept. 2021 – Present
Division of Applied Technology, College of Arts and Sciences, Shenandoah University, Winchester, VA

Co-Director, Shenandoah Center for Immersive Learning (SCiL) | *May 2022 – Present* Shenandoah University, Winchester, VA

Associate Professor, Virtual Reality Design | *August 2021 – May 2024*Division of Applied Technology, College of Arts and Sciences, Shenandoah University, Winchester, VA

Associate Professor (tenured), Department of Computer Science | *August 2019 – August 2021* School of Humanities and Sciences, Ithaca College, Ithaca, NY

Assistant Professor, Department of Computer Science | *August 2013 – August 2019* School of Humanities and Sciences, Ithaca College, Ithaca, NY

Education

Ph.D. Syracuse University, Information Science | May 2013

School of Information Studies | Dissertation Title: *Design Science in Human-Computer Interaction: A Model and Three Examples* | **Winner:** 2013 Syracuse University School of Information Studies Doctoral Prize

Advisor

Dr. Ping Zhang, Syracuse University, School of Information Science

Committee

- Dr. Dan Cosley, Cornell University, Computing & Information Science
- Dr. Mike D'Eredita, Syracuse University, School of Information Science
- Dr. Alan Foley, Syracuse University, School of Education
- Dr. Michael Schoonmaker, Syracuse University, S.I. Newhouse School of Public Communication
- Dr. Howard Turtle, Syracuse University, School of Information Science
- Dr. Yang Wang, Syracuse University, School of Information Science

M.Phil. Syracuse University, Information Science | December 2012

School of Information Studies (GPA 3.95)

M.S. Syracuse University, New Media | July 2006

S.I. Newhouse School of Public Communications (GPA 4.0)

B.A. Syracuse University, Television-Radio-Film Production | May 2001

S.I. Newhouse School of Public Communications (Magna Cum Laude)

B.A. Syracuse University, History | *May 2001*

Maxwell School of Citizenship and Public Affairs (Magna Cum Laude)

Active Research Projects

Ghosts of the Argonne: WW1 History in VR | Jan. 2022 - Present

Ghosts of the Argonne is a VR recreation of the M1897 "French 75" artillery gun, arguably the first modern field artillery gun and famously used during World War 1. Users will be able to work together, operating the gun realistically, and taking on the role of real U.S. servicemen from Harry S. Truman's battery during the 1918 Meuse-Argonne offensive. This research explores multi-user VR interactions in historical-educational contexts.

Wilton House VR: Recreation of a 1700's Tobacco Plantation in VR | April 2023 - Present

Wilton House VR is a design collaboration with the Wilton House Museum in Richmond, VA. Wilton House was the centerpiece of a 2,000-acre tobacco plantation of the 1700's. In the 1930's the house was moved to a new location and restored into a museum and historical site; the original property was given over to other uses. I directed and produced this collaboration, which recreates the original Wilton House property using VR technology, including outbuildings, tobacco fields, and dwellings used by enslaved workers, all of which have been lost to time. Wilton House VR is now part of the visitor experience at the Wilton House Museum.

Treasure Chain: Speech Language Pathology Gamification | May. 2023 – Present

Treasure Chain is an NIH-funded project exploring how gamification can impact motivation and engagement during speech language pathology interventions for younger children. Collaborating with researchers at Syracuse University, I designed a gamified treasure hunt experience to coincide with speech practice sessions using AI tools (DALL-E 2) to generate art assets. The research team is now in the process of studying the impact of the gamification layer.

Past Research Projects

Caged Birds: Augmented Reality Opera | May. 2023 – Nov. 2023

Caged Birds is an Opera directed by Ella Marchment, Director of Opera at Shenandoah University. I led a team of staff and students to create an <u>iPad-based augmented reality (AR) experience</u> integrated into the three-night performance run of the Opera. Audience members were able to see virtual dancers performing in the 3D space of the stage as they arrived to take their seats, using the iPad screen as a window into the performance to come.

Citizen Sort: Purposeful Gaming for Citizen Science | Sept. 2010 - Sept. 2023

I served as lead designer, project manager, and researcher on this NSF-funded research effort (SOCS Grant# 09-68470) which employed ~20 undergraduate designers and researchers to explore purposeful gaming in the context of online, crowdsourced science. The project includes two games, *Forgotten Island*, an entertainment-focused point-and-click adventure, and *Happy Match*, a science-focused matching game. The project was deployed to the public online and attracted more than 5,000 players. It has produced an ongoing stream of scientific publications, and was covered in various national media, including Scientific America, National Geographic, and the Guardian/Observer online. More information at www.citizensort.org.

Condition One: Mixed-Reality Firearms Safety Instruction | Sept. 2019 – Sept. 2021

Condition One is a mixed-reality (MR) system designed to teach firearms safety. This system helps learners to practice instructor-guided habit formation using a safe, non-functional, practice firearm connected to a virtual environment, receiving real-time feedback about their performance. Development is guided by formative research with law enforcement and private firearms instructors, and is part of an overarching exploration of game technologies and physical computing systems used in high-stakes, safety-critical instructional contexts.

PLAY | WRITE: A VR Writing Playground | Sept. 2017 - Sept. 2021

This project is an exploration of the creative and functional affordances of virtual reality for deep work practices such as creative and scholarly writing. My students and I developed a prototype system that includes full-fidelity VR environments, a variety of interaction elements, and several mixed-reality components, including a moveable writing desk that has virtual and physical components. *Play | Write* was developed using *Autodesk Maya*, the *Unity* Game Engine, the *LeapMotion 2* IR gesture tracking system, 3D printed components, and the *HTC Vive* SDK.

Arena: Purposeful Gaming for Informal Second Language Acquisition | Sept. 2014 - Aug. 2018

Arena is an adventure video game set in a Spanish-speaking world. The goals of the game are to support Spanish vocabulary acquisition for second language learners, and the goals of this research are to investigate how video game worlds, stories, and mechanics can engage learners who are not motivated by traditional classroom instruction. Several versions of Arena were developed using JavaScript and the Phaser API by a team of more than 18 Ithaca College computer science and emerging media students. Papers from this project, co-authored with undergraduates, were honored with best poster and honorable mention best paper awards.

TEMPO: Interactive Information Visualization for Military History Education | Sept. 2010 – Sept. 2012

TEMPO is an interactive map depicting the 1942 battle of Midway. Working in conjunction with domain experts, I designed and built this system to enhance instructional lectures in the military history classroom. My design goals included finding ways to visualize abstract concepts such as luck, timing, and decision-making in battle. My research goals included evaluating TEMPO for its impact on the student and instructor experience.

Publications

Publications in Progress

- Prestopnik, N.R. & Tang, J. (2023) Immersion and Presence in the Digital Humanities: Virtual Worlds, Real Opportunities. *In review at the International Journal of Digital Humanities*.
- Prestopnik, N.R. (2023) Ghost of the Argonne: Disembodiment and Immersion in a Virtual Reality History Experience. *In review at the International Journal of Designs for Learning (IJDL)*.

Refereed Journal Publications

- Heng, Y.K., Liew, J.S.Y., Leong bin Abdullah, M. F. I., Tang, Y. & Prestopnik, N.R. (2023) ReWIND: A CBT-Based Serious Game to Improve Cognitive Emotion Regulation and Anxiety Disorders. *International Journal of Serious Games* (Forthcoming).
- Jian Tang & Nathan R. Prestopnik (2023) Science Gamers, Citizen Scientists, and Dabblers:
 Characterizing Player Engagement in Two Citizen Science Games. *International Journal of Human-Computer Interaction*, 39:8
- Tang, J. & Prestopnik, N. (2019). Exploring the impact of game framing and task framing on user participation in citizen science projects. *Aslib Journal of Information Management*, (71) 2, pp. 260-280.
- Prestopnik, N.R., Crowston, K. & Wang, J. (2017). Gamers, Citizen Scientists, and Data: Exploring Participant Contributions in two Games with a Purpose. *Computers in Human Behavior* (68), pp. 254-268.
- Prestopnik, N.R. (2016). Games, Stories and Language: Motivating Second Language Acquisition with Play. *International Journal of Designs for Learning* (7) 3, pp. 72-87.
- Prestopnik, N. R., & Tang, J. (2015). Points, stories, worlds, and diegesis: Comparing player experiences in two citizen science games. *Computers in Human Behavior* (52), pp. 492-506.
- Kim, S.Y.S., Prestopnik, N.R. & Biocca, F.A. (2014). Body in the Interactive Game: How Interface Embodiment Affects Physical Activity and Health Behavior Change, *Computers in Human Behavior* (36), pp. 376-384.
- Prestopnik, N.R. (2013) Cooperative Visualization: A Design Case, *Library Hi Tech*, (31) 2. (A version of this article was originally presented at *iConference* 2013, held in Fort Worth, Texas, 12–15 February, 2013.
- Prestopnik, N.R. & Foley, A. (2012). Visualizing the Past: The Design of a Temporally Enabled Map for Presentation (TEMPO), *International Journal of Designs for Learning. Vol 3, No 1*.
- Prestopnik, N.R. (2010). Theory, Design and Evaluation (Don't Just) Pick any Two, AIS Transactions on Human-Computer Interaction (2) 4, pp. 167-177.

Refereed Conference Proceedings

- Heng, Y. K., Liew, J. S. Y., Abdullah, M. F. I. L., Tang, Y., & Prestopnik, N. (2023). ReWIND: A story-based serious game to reinforce learning of CBT strategies for anxiety disorders. *Joint Conference on Serious Games 2023*, Dublin, Ireland.
- Lane, N.* & Prestopnik, N.R. (2017). Diegetic Connectivity: Blending Work and Play with Storytelling in Serious Games. *CHIPlay 2017*. Amsterdam, Netherlands, Oct. 15-18 2017. * *Undergraduate co-author* | **Runner-Up**: *Best Paper Award*
- Tang, J. & Prestopnik, N. (2017). Effects of Framing on User Contribution: Story, Gameplay and Science. *America's Conference on information Systems (AMCIS) 2017*. Boston, MA, USA, Aug. 10-12 2017.
- Tang, J. & Prestopnik, N.R. (2016). Toward a Meaningful Framing for User Participation in a Gamified Information System. *European Conference on Information Systems*. Istanbul, Turkey, 12-15 June, 2016.
- Prestopnik, N.R., Crowston, K. & Wang, J. (2014). Exploring Data Quality in Games with a Purpose. *iConference*. Berlin, Germany, 4–7 March, 2014.
- Prestopnik, N.R. (2013). Cooperative Visualization: A Design Case. *iConference*. Fort Worth, TX, 12–15 February, 2013.

 Winner: Lee Dirks Best Paper Award
- Crowston, K. & Prestopnik, N.R. (2013). Motivation and Data Quality in a Citizen Science Game: A Design Science Evaluation. *Hawaii International Conference on System Sciences (HICSS)*. Wailea, Maui, HI, 7–10 January, 2013.
- Prestopnik, N.R. & Crowston, K. (2012). Purposeful Gaming & Socio-Computational Systems: A Citizen Science Design Case. *ACM Group: International Conference on Supporting Group Work*. Sanibel Is., FL, 27–31 October, 2012.
- Prestopnik, N.R. & Crowston, K. (2012). Citizen Science System Assemblages: Toward Greater Understanding of Technologies to Support Crowdsourced Science. *iConference*. Toronto, ON, Canada, 8–11 February, 2012.
- Prestopnik, N.R. & Crowston, K. (2011). Gaming for (Citizen) Science: Exploring Motivation and Data Quality in the Context of Crowdsourced Science through the Design and Evaluation of a Social-Computational System, 7th IEEE International Conference on e-Science.

 Stockholm, Sweden, 6–8 December, 2011.
- Prestopnik, N.R. & Foley, A. (2011). The TEMPO of Battle: Designing a Temporally Enabled Map for Presentation, *ED-MEDIA*. Lisbon, Portugal, 27 June–1 July, 2011.
- Prestopnik, N.R. & Zhang, P. (2010). Coping With Nuisances on the Web. *16th Americas Conference on Information Systems*. Lima, Peru, 12–15 Aug, 2010.

 Nominated: Best Paper Award

Refereed Conference Posters and Notes

- Lane, N.*, Fletcher, E.*, Wang, Y.* & Prestopnik, N.R. (2016). Arena: Designing an Adventure Video Game for Second Language Engagement and Acquisition. *iConference 2016*. Philadelphia, PA. March 20-23, 2016.
 - * Undergraduate co-authors | Winner: Best Poster Award
- Prestopnik, N.R. & Yan, J.L.S. (2014). Obscuring the Task: Story and Theme as Motivators in an Emotion Annotation Game. *Collective Intelligence 2014*. Massachusetts Institute of Technology, June 10-12, 2014.
- Prestopnik, N.R. and Souid, D. (2013). Forgotten Island: A Story-Driven Citizen Science Adventure. ACM SIGCHI Conference on Human Factors in Computing Systems (CHI). Paris, France, April 27 – May 2, 2013.
 - Finalist: CHI 2013 Student Game Design Competition
- Crowston, K., Prestopnik, N.R. & Wiggins, A. (2012). Motivating Citizen Scientists with a Classification Game. *Conference on Public Participation in Scientific Research*. Portland, OR, 4–5 August, 2012.
- Prestopnik, N.R. (2011). Information Spaces as Interactive Worlds. *iConference*. Seattle, WA, 8–11 February, 2011.

Refereed Book Sections

Prestopnik, N.R. & Zhang, P. (2014). Human Computer Interfaces (HCI): Interactivity, Immersion and Invisibility as New Extensions, in D. Straub and R. Welke (eds.), *Encyclopedia on Management Information Systems*, 3rd Edition, Wiley.

Editorially Reviewed Book Chapters and Articles

- Alten, S.R. (2008). Audio in Media, Ninth Edition. Boston, MA: Wadsworth. (Chapter 17, *Audio for Interactive Media: Game Sound*, drafted by N.R. Prestopnik for 8th and 9th editions).
- Alten, S.R. (2008). Audio in Media, Ninth Edition. Boston, MA: Wadsworth. (Chapter 18, *Internet Production*, drafted by N.R. Prestopnik for 8th and 9th editions).
- Prestopnik, N.R. (2009). Q n A: Realistic Outdoor Lighting Techniques. 3D World, (120), 88.
- Prestopnik, N.R. (2009). Q n A: Using 3D Particle Systems to Simulate a Laser Effect. 3D World, (115), 78.
- Prestopnik, N. (2009). Q n A: Designing an Underwater Scene in TrueSpace. 3D World, (112), 77.
- Prestopnik, N.R. (2008). Modeling on Rails. 3D World, (109), 58-59.

Invited Presentations and Workshop Participation

- Invited Demonstration: *Virtual Reality Games* at the Milton J. Rubenstein Museum of Science and Technology (MOST), Syracuse, NY, May 10, 2019.
- Invited Presentation: *Play, Purpose, and Design* at the Milton J. Rubenstein Museum of Science and Technology (MOST), Syracuse, NY, December 13, 2018.
- Invited Lecture: *Designers and Data: Design, Science, and Knowledge in UI/UX* at the Syracuse University School of Information Studies, Syracuse, NY, March 26, 2018.
- Invited Seminar Instructor: Serious Unseriousness: Researching Games, Play, and Purpose at the Central University of Finance and Economics (CUFE), Beijing, China, June 1-15, 2017.
- Workshop: Human Computation Roadmap Summit Workshop at the Computing Research Association (CRA) Computing Community Consortium (CCC), Woodrow Wilson International Center for Scholars, Washington, DC. June 18-20, 2014.
- Presentation: Games, Tasks and Crowds: Designing Purposeful Interactions Around Stories and Play at the Production and Operations Management Society Annual Conference, Crowdbased Innovation: Central Themes and New Insights Track. Atlanta, GA. May 10, 2014.
- Workshop: White House Office of Science and Technology Policy (OSTP) Crowdsource Games Workshop. White House Eisenhower Executive Office Building, 1650 Pennsylvania Avenue, Washington DC. April 29, 2014.
- Workshop: *National Science Foundation (NSF) Regional New York State Workshop on Social Computational Systems*. Syracuse University. Syracuse, NY. April 5, 2014.
- Presentation: Citizen Science Design: Socially Intelligent Computing to Support Citizen Science at the Social Computational Systems Citizen Science Workshop, Blue Mountain Lake, NY. May 24–27, 2011.

Teaching Experience

Instructor of Record, Undergraduate

ARVR 105: Introduction to Immersive Technology | Shenandoah University | 2 semesters Redesigned the course to include topics on computing history, AR/VR/XR, and innovation in the XR computing discipline.

CSC 121: Introduction to Computer Programming I | Shenandoah University | 1 semester Introduction to computer science and programming fundamentals in Python.

ARVR 220: Introduction to Game Design | Shenandoah University | 1 semester Redesigned this course from COMP 107 to fit a 3-credit model, covering game design principles such as mechanics, interactive storytelling, 2D game technologies, and 2D game aesthetics.

ARVR 205: Graphic Design for Interfaces | Shenandoah University | 1 semester Designed this course to cover graphic design fundamentals, with particular attention to techniques and considerations of interactive interface design, UI/UX, and human-computer interaction.

ARVR 290/291: ARVR Lab #1 & #2 | Shenandoah University | 4 semesters

Redesigned this two-semester lab sequence to give students hands-on experience with design tools such as *Unreal Engine*, *Unity*, *Adobe Substance Painter*, 3D modeling in *Autodesk Maya* and *Blender*, 3D scanning, motion/performance capture, sound recording (studio and field), and more.

ARVR 310: Design of Immersive Experiences | Shenandoah University | 1 semester Designed this course to cover design thinking and fundamentals of UI/UX and HCI. Students engage with various design and implementation projects, building on work completed in earlier courses.

ARVR 401: Design Thinking and Prototyping | Shenandoah University | 1 semester The first of a two-course capstone sequence. Students propose and evaluate various project concepts, refining to a single capstone implementation to be built in the second capstone course.

ARVR 420: Special Topics in Game Design | Shenandoah University | 1 semester Designed this course as a deep dive into advanced game topics, including the psychology of play, motivation, reward systems, and gamification. Students read published research as part of wideranging discussions about games and game design, applying insights to game design projects.

COMP 202: Computational Foundations of Emerging Media | Ithaca College | 4 semesters Redesigned the course to include topics in EM and computing history, JavaScript, structured data (JSON), interaction and event-driven programming, and asset creation using Adobe Creative Suite.

COMP 290: 3D Computer Graphics & Animation | Ithaca College | 3 semesters

Designed experimental course, covering various aspects of 3D computer graphics. Students used Autodesk Maya software while also exploring the underlying technical details of 3D graphics.

COMP 325: Introduction to Human-Computer Interfaces | Ithaca College |8 semesters Redesigned the course and covered principles of human-computer interaction for various technologies from the perspectives of designer, user, researcher, and implementer. Upgraded course from 225 to 325 level for spring 2015.

COMP 171: Principles of Computing Science | | Ithaca College | 2 semesters Introduction to computer science: programming fundamentals in the Python programming language, including OOP.

COMP 107: Introduction to 2D Game Development | Ithaca College | 7 semesters Redesigned the course and covered game design principles, designing and implementing game mechanics, interactive storytelling, 2D game technologies, and 2D game aesthetics.

COMP 106: Multimedia Programming | Ithaca College | 3 semesters

Redesigned the course and covered the creative aspects of multimedia programming using web technologies such as HTML5, CSS3, JavaScript, and JavaScript/Canvas.

IST 263: Web Design & Management | Syracuse University | 1 semester Developed a syllabus and covered WWW and the internet, principals of web management, HTML5, CSS/CSS3, jQuery, Information Architecture for the Web, and Visual Design for the Web.

TRF 414: Writing & Designing for Interactive Media | Syracuse University | 1 semester Taught for the Department of Defense Advanced Visual Information Program. Developed a syllabus and covered XHTML, CSS, Graphic Design, Flash, Usability, and Information Architecture.

ART 100: Computer Animation | Fulton-Montgomery Community College | 2 semesters Designed and taught two sections of an introductory 3D computer graphics course covering 3D modeling, shading, lighting, and basic animation.

Instructor of Record, Graduate

EXCO 61101: The Artifact: Innovation, Iteration & Communication | Ithaca College | 1 session Designed and taught a 2-credit weekend intensive graduate course for students in the Park School of Communications Executive Master's in Communication Innovation. Focus on artifact design, making, and communication. Fall 2019: Ithaca, NY @ Rev Startup Generator.

EXCO 61106: Gamification & Crowdsourcing | Ithaca College | 2 sessions

Designed and taught a 2-credit weekend intensive graduate course for students in the Park School of Communications Executive Master's in Communication Innovation. Focus on games and gamification. Winter 2015: Boston, MA @ Emerson College and MIT; Spring 2017: Chicago, Il @ Adler Planetarium / Zooniverse.

Co-Instructor

IST 688: Social Web Technologies | Syracuse University | 1 semester

Co-taught a social web technologies course as part of a teaching practicum for credit. Instructed and guided students as they developed websites with a social-computational focus, such as crowdsourced recommendation services, collaborative art, and ride sharing.

IST 400: Scripting for Games | Syracuse University | 1 semester

Co-taught a game scripting course as part of a teaching practicum for credit. Instructed and guided students as they developed web-based games using XHTML, CSS, and JavaScript.

SCiL Directorship

The Shenandoah Center for Immersive Learning (SCiL) is an AR/VR/XR design studio and research center located on the Shenandoah University campus. I direct the center in partnership with a colleague in the VR program. My SCiL leadership consists of:

- Oversight of SCiL events and visits:
 - Hosting VIP tours, visits, and discussions (from federal, state, local governments, foreign embassies, tech sector, etc.)
 - Engagement with university leadership on various initiatives
 - Engagement with prospective students and parents
 - Showcases for area school districts, business, etc.
- Oversight and Routine Improvement of SCiL studio facilities:
 - 12+ workstation computers and software
 - 40+ VR/AR headsets and related equipment
 - 360-degree camera systems and associated equipment
 - Motion capture studio
 - Sound production studio
 - Makerspace
 - Haptic and XR systems
- Creative Director / Producer of SCiL AR/VR/XR Projects
 - Wilton House VR Historical Recreation (funded)
 - AR Collaboration with SU Opera (internally funded)
 - Quarterback Trainer 360/VR Training Tool (internal)
 - Sons of the American Revolution History Video Series (funded)
 - Emil & Grace Shihadeh Innovation Center 360 Video Production (funded)
 - Take CoVR VR multi-user game (internal)
 - Immersive XR Photo Display with Gesture Interactions (internal)
- Oversight of SCiL Budgets and Purchasing
 - Multiple SCiL budgets, totaling ~\$20k \$50k in annually available funding
 - Revenue streams from projects, events, and other center operations
 - Purchasing for various center facilities improvements
 - Hiring contractors (student and professional) for project support
- Oversight of SCiL staff:
 - Three full-time professional staff:
 - Immersive Technology Specialist
 - Immersive Media Specialist
 - Operations Manager
 - 10-15 student employees each AY

Academic Service

Service to Scholarly Community

Reviewer: Journals, Conferences and Books

- Journal: Computers in Human Behavior (CHB)
- Journal: Computers and Education
- Journal: Transactions on Human-Computer Interaction (TOCHI)
- Journal: International Journal of Human-Computer Studies (IJHCS)
- Journal: Behavior and Information Technology (BIT)
- Journal: Journal of Science Communication (JCOM)
- CHI Conference
- Hawaii International Conference on System Sciences (HICSS)
- Transactions on Social Computing
- JMIR Serious Games
- ACM Conference on Computer Supported Cooperative Work
- International Conference on Information Systems (ICIS)
- iConference
- Americas Conference on Information Systems (ACIS)
- Book: Reviewed Proposal on Semantic Web for Imperial College Press
- Innovation and Technology in Computer Science Education (ITiCSE)

Service at Shenandoah University

University & School Service

- Virtual Reality Design, B.A., Program Director (2021-Present)
- Virtual Reality Design, B.A., Program Redesign (2021)
- Game Design Minor Development (2021)
- Advising and Student Success Committee, member (2021-2022)
- DAT Curriculum Committee, member (2021-present)
- DAT Director Search Committee, member (2022)
- TTL Tech Liaison Group, member (2022)
- Experiential Learning Trip: Organized trip will colleague from Education Program and led 30+ students to FL for Disney Imagineering and NASA STEM Immersion Experiences (summer 2022)

Service at Ithaca College

College & School Service

- Whalen Research Symposium Committee (2016-present; co-chair 2018-present)
- Park School of Communication Dean Search Committee (2019-2020)
- Biology Faculty Search External Committee Member (2019-2020)
- H&S 3D Lab co-coordinator, School of H&S (2015-2018)
- EXCO Master's Defense Committee Member (6 defenses), Park school (2015-2016)
- Global Game Jam Faculty Organizer, Ithaca College Annual Event Site (2014-present)
- Ithaca College Game Developers Club, Faculty Advisor (2013-present)
- Ithaca College Gamers Club, Faculty Advisor (2016-2017)
- Juror, Campus Google Glass App Competition (2014)

Departmental Service

- Department makerspace development and deployment (2020-present)
- VR Lab Facilities Coordination (2016-present)
- Emerging Media Steering Committee Member (2016-present)
- Faculty Search Committee Member for EM Position at Park School (2014-2017)
- Integrative Core Curriculum Application for COMP 107 (Summer 2014)
- Integrative Core Curriculum Application for COMP 106 (Spring 2014)
- Ongoing departmental service as required

Service at Syracuse University

University and Departmental Service

- Global Game Jam Organizing Committee, SU Event Site (2012, 2013)
- Personnel Committee (2011 2012)
- Doctoral Programs Task Force (2011)
- Undergraduate Committee (2010 2011)
- Peer Advisor to the 2010 PhD Cohort (2010 2011)
- Strategic Faculty Search Committee (2010)
- Doctoral Programs Committee (2009 2010)

Service at Morrisville State College (Staff)

College and Departmental Service

- Morrisville State College Faculty Congress, Ex Officio Member (2007 2009)
- Web Advisory Group, Chair (2006 2009)
- Web Advisory Dean's Group, Chair (2006 2009)
- College Judicial Board (2008 2009)
- Crisis Communication Team (2007 2009)
- Community Service Initiative Committee (2007 2009)
- Hiring Committees for Web-Related Positions (2006 2009)
- Review Committee, Web Development Bachelor Degree Program (2009)
- Technology Services Laptop Scholarship/Award Committee (2007 2009)

Professional Interaction Design Experience

Morrisville State College, State University of New York, Morrisville, NY

Interactive Design Consultant | September 2009 – September 2011

After concluding full-time employment at Morrisville State College to pursue my PhD, I continued to work with the school as a consultant. I led a college-wide video production initiative, writing, shooting, and editing more than 150 short videos to promote the school and its unique educational vision. I also worked with senior administrators and recently hired web designers to strategize the college's creative and technical approach for the web.

Web Administrator | June 2006 - August 2009

Working with the college president, administrators, deans, faculty, staff, and students, I established a creative vision for the college's web environment and shepherded that vision from concept to implementation and launch. During my tenure as web administrator, I established information architecture, created engaging user experiences, and developed a consistent and effective design language for the college's more than 70 public and internal websites. Furthermore, by employing user testing and aggressively incorporating user feedback, I designed and developed a highly effective custom ASP.NET CMS system to support the college's extensive front-end web infrastructure. Finally, I managed the college's web development department, supervising web design staff, liaising with technologists for networking and systems administration, establishing and managing department policy, and sitting on hiring committees for various web-related positions.

Imperial Solutions

Owner / Freelance Designer | 2000 – Present

As a practicing interactive designer, I have designed creative user experiences, attention-grabbing visuals, and web systems on a freelance basis for numerous clients. Portfolio available at www.imperialsolutions.com.

ICOM, Clifton Park, NY

Art Director | November 2003 - June 2005

I leveraged my design background and technical experience to lead ICOM's locally and regionally focused web design department. Equal parts creative, technical, and managerial, this position gave me an opportunity to hone my visual sense, establish a strong working knowledge of web programming (primarily ASP classic), and supervise client web projects from start to finish.

Make-Up Artist Magazine, Los Angeles, CA

Multimedia Director | April 2002 – October 2003

In this position I combined my interest in film production and special effects with my interactive design experience. I redesigned the company website from the ground up, authored DVDs, and established myself as the magazine's primary layout artist. This work culminated in a 2003 redesign, where the managing editor and I worked as a team to establish a brand new design language and layout for the magazine. Another major accomplishment was to oversee video production for the Make-Up Artist Trade Show, an industry event attended by film and television make-up professionals, including numerous Academy and Emmy Award winners. *Make-Up Artist Magazine* is one of the film industry's premier make-up trade magazines, featuring artists who have worked on some of the most iconic past and current films in release (the cover of one issue can be seen during the final credits of the 2012 film *Argo*).

Honors, Awards & Distinctions

Academic & Professional Honors

Shenandoah University Fund for Excellence Grant (Summer 2022)

Ithaca College H&S STEM Student Sponsor (Summer 2018, 2 Students)

Best Paper Runner Up with undergraduate Co-Authors, CHIPlay 2017 (2017)

Ithaca College H&S STEM Student Sponsor (Summer 2016)

Best Poster Award with undergraduate Co-Authors, iConference 2016 (2016)

Upsilon Pi Epsilon Honor Society for Computing and Information Disciplines (2016)

Ithaca College Center for Faculty Excellence Summer Research Grant (Summer 2015)

Ithaca College Dana Student Internship Program Sponsor (Summer 2015)

Doctoral Prize, SU School of Information Studies (2013)

Lee Dirks Best Paper Award Winner, iConference 2013 (2013)

Finalist, CHI 2013 Student Game Competition for Citizen Sort (2013)

Grand Prize Winner, SU Student App Competition for Citizen Sort (2012)

Best Paper Nomination, AMCIS 2010 (2010)

Future Professoriate Program, 2 Year Stipend (2009, 2010)

TrueSpace 3D Artwork Gallery 1st Place, 2nd Place, and over 15 Honorable Mentions (2000-2008)

SUNY/CUAD Awards for Excellence Program (2007)

S.I. Newhouse School of Public Communications Summer Fellowship for Graduate Study (2006)

TrueSpace Computer Animation Contest; 2nd place accident reconstruction animation produced for Crowsey, Inc. (2004)

S.U. University Honors, Magna Cum Laude (2001)

S.U. Faculty Advising Committee (2001)

Golden Key National Honor Society (2001)

S.U. Chauncey Horton Memorial Award (2001)

S.U. Dean's List, Eight Consecutive Semesters (1997-2001)

S.U. Honors Program (1997-2001)

S.U. Chancellor's Scholar (1997)

National Council of Teachers of English National Writing Award (1997)

Barbara Moynehan Excellence in Writing Award (1997)

Computer and Technology Scholarship (1997)