

Zachary Winegardner

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EDUCATION

- 2018 **M.F.A. Design**
The Ohio State University, Columbus, OH
Focus: Digital Animation & Interactive Media
- 2015 **B.S. Communications *magna cum laude***
Ohio University, Athens, OH
Focus: Special Effects, Games, Animation. Studio Art

TEACHING EXPERIENCE

- Fall 2018 - Current **LECTURER** | The Ohio State University
Department of Design
Full-time 4/4 appointment focused on Design Foundations & Design Thinking Minor. Coursework Includes: perspective drawing, analogue model building, graphic design, Design Thinking & Visualization
- Spring 2022 **LECTURER** | The Ohio State University
Advanced Computing Center for the Arts and Design
Taught graduate level class on animation including concept, modeling, surfacing, rigging, animating, lighting, rendering, and compositing
- Spring 2020 **ADJUNCT FACULTY** | University of Florida
Digital Worlds Institute
Taught course on play theory and games studied in context of humanities
- Fall 2018 **ADJUNCT FACULTY** | Ohio University
School of Media Arts and Studies
Taught graduate level course on VR and 360 film production
- Fall 2018 **LECTURER** | The Ohio State University
Advanced Computing Center for the Arts and Design
Taught graduate level course on digital sculpting and photogrammetry
- Fall 2016 - Spring 2018 **GRADUATE TEACHING ASSOCIATE** | The Ohio State University
Department of Design
Assistant to Professor Scott Swearingen and Michael Kellner. Duties included: Grading assignments, advising students on creative work, directing critiques, and consultation on course structure

PROFESSIONAL EXPERIENCE

- March 2019 – Present **INTERACTIVE DESIGNER** | Littleseed Inc. | Powell, OH
Character design, modeling, rigging, motion capture, animation, and programming for variety of interactive applications.
- May 2018 – Sept 2019 **INTERACTIVE MEDIA DESIGNER** | ACCAD | Columbus, OH
Worked on NIH grant creating assets and programming for VR simulation to train emergency responders in triage processes for mass casualty incidents.
- May 2017 – Sept 2017 **SOFTWARE DEVELOPER** | Roto Group LLC | Dublin, OH
Wrote software for interactive museum exhibits, created 3D model assets and animation, installed and optimized hardware for exhibit cabinetry
- Jan 2016 – Aug 2016 **GRADUATE RESEARCH ASSOCIATE** | ACCAD | Columbus, OH
Worked on granted funded projects listed below, rendered animations for pro bono police training video

Released Applications

- 2019 “VARIAT Sim” | Littleseed Inc. & Nationwide Children’s
Training application for medical providers to address implicit bias

RESEARCH

Contributions to Funded Research

- 2022 Indiana Humanities Innovation Grant
NEH, \$10,000 (Grant)
Co-PIs: Archaeological Research Institute, Littleseed Inc.
Duties: AR mobile app development and asset management
- 2019 Virtual and Augmented Reality Implicit Association Training (VARIAT)
MEDTAPP, \$5.5 million distribution across 5 organizations funding 11 projects
Co-PIs: Nationwide Children’s Hospital, OSU Wexner Medical
Contributions to 1 project (Littleseed, technology partner)
Duties: 3D character development and animation
- 2018-2019 “Improving Patient Safety Using Virtual Reality to Train and Assess Emergency
Personnel Responding to a Mass Casualty Incident”
NIH, \$1.5 million
Co-PIs D. Danforth, MD, PhD & N. Kman, MD
Duties: 3D character asset creation & interactive development (5% contribution)

- 2016 “Mediated Space and Human Experience: Using Locative Technology to Enhance Presence and Place”
BETHA, \$53,933.00 (Grant)
Co-PIs: Maria Palazzi, Dr. Mary Anne Beecher, Dr. Matthew Lewis
Duties: Previsualization and organization of archival information
- 2016 “From Mediated Experience to Sense of Place: Seeding the Campus Environment to Reveal Hidden Stories”
Arts and Humanities 2014-2015 Faculty Research and Creative Activity Support Program Larger Grant: \$15,000
Co-PIs: Maria Palazzi, Dr. Mary Anne Beecher
Duties: Constructed geometry of historical spaces for mobile application

Publications

- 2022 “Tools to Imagine: Digital Methods of Investigating Classical Art”
AMPS - Representing Pasts Visioning Futures, International, Virtual
(peer reviewed, abstract)
- 2020 Hillary Katz & **Zachary Winegardner**. (2020) Create, Connect, Contemplate: Engaging Digital Technology for the Future Art Museum and Curriculum. *Art Education, Vol 73 (3)*, 29-37.
(peer reviewed)
- 2018 “The Digital Tool in the Curious Maker’s Hand: Critical Exploration Processes to Engage Historical Paintings for New Inquiry and Dialogue”
(MFA Thesis)
- 2017 “Design Research Artifacts and Complex Visual Data: Ways of Seeing, Ways of Saying”
Things of Design Workshop, CHI 2017 Conference, Denver, CO
(peer reviewed, conference proceedings)
- 2017 “Uncovering Classical Painting through Design Process and Artifacts”
Design Incubation Colloquium 3.3, Kent, OH
(peer reviewed, conference proceedings)

Academic Presentations and Workshops

- 2022 “Tools to Imagine: Digital Methods of Investigating Classical Art”
AMPS - Representing Pasts Visioning Futures, International, Virtual
[Link to presentation](#)
- 2022 “Virtual Reality to Train and Assess Emergency Personnel Responding to a Mass Casualty Incident”
National Association of EMS Physicians, San Diego, CA
(5% contribution)

2019	MCIVR Demo <i>ACCAD Annual Open House, The Ohio State University</i>
2018	Unraveling Complexity in Thomas Cole's The Course of Empire <i>ACCAD Annual Open House, The Ohio State University</i>
2017	"Reconstructing a Classical Painting in 3D" <i>The Ohio State University College of Engineering Alumni Event Columbus, OH</i>
2017	"Design Research Artifacts and Complex Visual Data: Ways of Seeing, Ways of Saying" <i>Things of Design Workshop, CHI 2017 Conference, Denver, CO</i>
2017	"Interactive Painting Exploration" <i>ACCAD Annual Open House, The Ohio State University</i>
2017	"Virtual Painting Exploration: Oath of the Horatii as a 3D Environment" <i>Hayes Graduate Research Forum, The Ohio State University (juried)</i>
2017	"Uncovering Classical Painting through Design Process and Artifacts" <i>Design Incubation Colloquium 3.3, Kent, OH (peer reviewed)</i>
2016	"Classical Painting in Virtual Reality" <i>ACCAD Annual Open House, The Ohio State University</i>

Exhibitions

2018	"Past Pigment" <i>The Ohio State University Design Exhibition Urban Arts Space, Columbus, OH</i>
2018	"Past Pigment" <i>The Columbus Moving Image Art Review Columbus, OH</i>
2017	"The Fall of Bacchus" <i>The Columbus Moving Image Art Review Columbus, OH</i>

Patents/Licensing

2022	Polymorphic Virtual Casualty Configuration System (PVCCS) <i>License for Mass Casualty Incident Virtual Reality application, "First Responders" (5% Contribution)</i>
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Awards

2017	Hayes Graduate Research Forum, Honorable Mention <i>For outstanding research in the Arts</i>
2017	The Ohio State University Arts and Humanities Graduate Research Grant <i>\$500 for conference travel</i>
2017	The Ohio State University Department of Design Graduate Research Fund <i>\$500 for conference travel</i>
2017	The ACCAD Graduate Research Fund <i>\$500 for conference travel</i>
AY 2017-2018	Graduate Associateship, \$27,311.00
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2016	Graduate Associateship, \$27,311.00 (2 semesters)
2015	Ohio University Director's Award of Excellence <i>For outstanding contributions in the area of media arts and studies</i>

SERVICE

Pro Bono Work

2022	3D PRINTING CONSULTANT Applied Experience, Columbus, OH <i>Advised 3D printing and fabrication process for industrial design prototypes.</i>
2018	MOBILE APPLICATION DESIGNER Dublin Arts Council, Dublin, OH <i>Created mobile app for refugee-created painting exhibition. Allowed visitors to engage with artwork by creating digital image inspired by exhibit.</i>
2016	PREVISUALIZATION ARTIST The Ohio State University Department of History, Department of Design <i>Virtually modeled and animated large-scale installation concept as visual aid for proposal from Professors Jeffrey Haase and David Staley.</i>
2015	3D GRAPHICS VOLUNTEER Fairfield Union High School, Lancaster, OH <i>Created motion graphics for instructional aid in chemistry course</i>
2015	DIGITAL SCULPTING TUTOR Game Research and Immersive Design Lab Ohio University, Athens, OH <i>Tutored undergraduates in sculpting techniques using Zbrush</i>

Guest Lecture/Critiques

- 2021 Guest Critic for "Video Games and Society" taught by Dr. Carla Corroto and Dr. Michael Hudoba
Otterbein University, Westerville, OH
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