



ZACH DUER

206 Park St, Christiansburg, VA 24073
510-846-4887
zachduer@vt.edu
zachduer.com

EDUCATION

- | | | |
|------|-----|--|
| 2014 | MFA | Virginia Commonwealth University, Richmond, VA Kinetic Imaging |
| 2009 | MA | Mills College, Oakland, CA Music Composition |
| 2007 | BM | Minnesota State University Moorhead, Moorhead, MN Music Composition <i>summa cum laude</i> |

ACADEMIC POSITIONS

- | | |
|-------------|--|
| 2023 – | Associate Professor, School of Visual Arts, Virginia Tech, Blacksburg, VA |
| 2017 – 2023 | Assistant Professor, School of Visual Arts, Virginia Tech, Blacksburg, VA |
| 2016 – 2017 | Immersive Environment Specialist, Virginia Tech, Blacksburg, VA |
| 2013 – 2015 | Instructor, Virginia Commonwealth University, Richmond, VA |
| 2015 | Instructor, John Tyler Community College, Chester, VA |
| 2012 – 2013 | Graduate Teaching Assistant, Virginia Commonwealth University, Richmond, VA |
| 2008 | Graduate Teaching Assistant [instructor of record], Mills College, Oakland, CA |

EXHIBITIONS / SCREENINGS / PERFORMANCES

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| 2023 | <i>dAnCing LiNes</i> , James Hockey Gallery, University for the Creative Arts, Farnham, UK. Installation of <i>dAnCing LiNes</i> . |
| 2023 | College Music Society 66 th National Conference, Miami, FL. Performance of <i>Inside the Burrow of Science</i> . |
| 2022 | Contact, 17 th Biennial Symposium on Art and Technology, New London, CT. Performance of <i>Daedalus Dreams</i> . |

- 2022 Oaxaca FilmFest, Oaxaca, Mexico.
Screening of *Time Garden: Skull Bridge*.
- 2022 TANZAHOi International Dance Film Festival 2022, Hamburg, Germany.
Screening of *Time Garden: Skull Bridge*.
- 2022 CAC7 Computer & Media Art in the Age of the Metaverse and NFT, Geneva, Switzerland.
Screening of *Time Garden: Skull Bridge*.
- 2022 Split Film Festival, Split, Croatia.
Screening of *Time Garden: Skull Bridge*.
- 2022 World Stage Design 2022 & Scenofest, Calgary, Alberta, Canada.
Screening of *Body, Full of Time*.
- 2022 Sound and Music Computing Festival (SMC-22), Saint-Étienne, France.
Screening of *Time Garden: Skull Bridge*.
- 2022 Noise Floor, Stoke-on-Trent, England.
Screening of *Time Garden: Skull Bridge*.
- 2022 Society for Electro-Acoustic Music in the United States, Kalamazoo, MI.
Screening of *Time Garden: Skull Bridge*.
- 2022 Dance Camera Pandemia, Istanbul, Turkey.
Screening of *Mass*.
- 2022 Supernova Digital Animation Festival, Denver, CO.
Screening of *Time Garden: Skull Bridge*.
- 2022 Iowa Composers Forum Summer Festival of New Music, Decorah, IA.
Screening of *Time Garden: Skull Bridge*.
- 2022 Synaptic Soiree. Torpedo Factory Art Center, Alexandria, VA.
Performed *Body, Full of Time: Narcissus*.
- 2022 Daedalus Dreams, CID LLC, Blacksburg, VA.
Performance of *Daedalus Dreams*.
- 2022 ICAT Creativity and Innovation Day, Moss Arts Center, Virginia Tech, Blacksburg, VA.
Installation of *In Between Spaces*.
- 2022 New Music + Technology Festival, Recital Salon, Squires, Virginia Tech, Blacksburg, VA.
Performance of *Inside the Burrow of Science*.
- 2022 Faculty Triennial, Moss Arts Center, Virginia Tech, Blacksburg, VA.
Installation of *Time Garden: Noon*.

- 2021 15th International Symposium on Computer Music Multidisciplinary Research, Tokyo, Japan.
Screening of *Time Garden: dawn replica*.
- 2021 18th Brazilian Symposium on Computer Music, Recife, Brazil.
Screening of *Time Garden: dawn replica*.
- 2021 San Francisco Dance Film Festival, San Francisco, CA.
Screening of *Time Garden: dawn replica*.
- 2021 Seoul International Computer Music Festival, Seoul, South Korea.
Screening of *Time Garden: dawn replica*.
- 2021 #social, Csong Institute for Contemporary Art, Gimpo, South Korea.
Installation of *Mass*.
- 2021 Screen Dance International, online.
Screening of *Mass*.
- 2021 Audio Mostly, online.
Screening of *Time Garden: dawn replica*.
- 2021 Festival de Cine-Arte en la Frontera, 11th Edition, San Cristóbal, Venezuela.
Screening of *Mass*.
- 2021 International Computer Music Conference 2021, online.
Screening of *Time Garden: dawn replica*.
- 2021 Experimental Dance & Music Film Festival, Carlton Cinema, Toronto, Canada, and LA LIVE Regal
Cinemas, Los Angeles, CA.
Screening of *Mass*.
- 2021 New York City Electroacoustic Music Festival, online.
Screening of *Time Garden: dawn replica*.
- 2021 Society for Electro-Acoustic Music in the United States, online.
Screening of *Time Garden: dawn replica*.
- 2021 Solidair, online.
Screening of *Cloud City Collage*.
- 2021 AltFF Alternative Film Festival 2021 Spring Edition, online.
Screening of *Time Garden: Mass*.
- 2021 IEEE 6th VR Workshop on Sonic Interactions for Virtual Environments, online.
Screening of *Time Garden: dawn replica*.
- 2021 Feet to the Floor Festival 2021, Northampton, MA.

- Screening of *Time Garden: dawn replica*.
- 2021 Sans Souci Festival of Dance Cinema, Boulder, CO. Screening of *Mass*.
- 2021 Excessive Realness, online. Performance of *Grey Patterns*.
- 2021 Red Rock ScreenDance Film Festival, Electric Theater, St. George, UT. Screening of *Mass*.
- 2021 DANCINEMA, online. Screening of *Mass*.
- 2021 New Music + Technology Festival, Moss Arts Center Cube, Virginia Tech, Blacksburg, VA. Screening of *Time Garden: Skull Bridge*.
- 2021 Creativity and Innovation Faculty Concert, online. Screening of *Time Garden*.
- 2020 7th ACM SIGPLAN International Workshop on Functional Art, Music, Modelling, and Design, Jersey City, NJ. Screening of *Time Garden: dawn replica*.
- 2020 SIGGRAPH 2020, Washington D.C. Installation at Immersive Pavilion of virtual reality exhibition *If this place could talk ... First World War tunnel warfare through haptic VR*.
- 2020 Artist Statement #5, Czong Institute for Contemporary Art, Gimpo, South Korea. Installation of *nothings_nomeanings*.
- 2020 Society for Electro-Acoustic Music in the United States, Charlottesville, VA. Installation of *Forgetfulness*.
- 2020 Conference for Research on Choreographic Interfaces, Providence, RI. Installation of *Time Garden*.
- 2020 *Or Be Forever Fallen*, Sherwood Oaks, Cranberry Township, PA. Performance of *Or Be Forever Fallen*.
- 2020 *Or Be Forever Fallen*, Steamworks Creative, Gibsonia, PA. Performance of *Or Be Forever Fallen*.
- 2020 Creative Technologies in Music Concert, online. Screening of *Time Garden: Heart*.
- 2020 Illuminating Flight and Refuge, Moss Arts Center, Virginia Tech, Blacksburg, VA. Installation of *Borderless Species*.
- 2020 ICAT Creativity and Innovation Day, Moss Arts Center, Virginia Tech, Blacksburg, VA. Installation of *Time Garden*.

- 2019 6th International Conference on Movement and Computing, Tempe, AZ.
Performance of *Body, Full of Time*.
- 2019 International Conference for Auditory Display 2019, Newcastle-upon-Tyne, UK.
Installation of *Forgetfulness*.
- 2019 ACCelerate: ACC Smithsonian Creativity and Innovation Festival 2019, Smithsonian National Museum of American History, Washington D.C.
Installation of *Exploring the World War I Tunnels of Vauquois through Virtual Reality*.
- 2019 Practicing Presence Festival, Northampton, MA.
Performance of *Body, Full of Time*.
- 2019 *Cube Dance: Square Dance Cubed*, Moss Arts Center Cube, Virginia Tech, Blacksburg, VA.
Performance of *Cube Dance: Square Dance Cubed*.
- 2019 ICAT Creativity and Innovation Day, Moss Arts Center, Virginia Tech, Blacksburg, VA.
Installation of *Body, Full of Time*.
- 2019 *Body, Full of Time*, Moss Arts Center Cube, Virginia Tech, Blacksburg, VA.
Performance of *Body, Full of Time*.
- 2018 New Interfaces for Musical Expression, Blacksburg, VA.
Installation of *Forgetfulness*.
- 2018 Declarations, Institute for Contemporary Art, Virginia Commonwealth University, Richmond, VA.
Installation of *Diverging, converging...*
- 2018 Intersections: 16th Biennial Symposium for Art and Technology, New London, CT.
Screening of *nothings_nomeanings*.
- 2018 Madatac 09_2018, Madrid, Spain
Screening of *nothings_nomeanings*.
- 2018 Alliance for the Arts in Research Universities National Conference, University of Georgia, Athens,
Installation of *Forgetfulness*.
- 2018 Exploring America's Forgotten War, Digital Scholarship Lab, Michigan State University, East Lansing, MI.
Installation of *Exploring the World War I Tunnels of Vauquois through Virtual Reality*.
- 2018 Exploring America's Forgotten War, Salem Museum & Historical Society, Salem, VA.
Installation of *Exploring the World War I Tunnels of Vauquois through Virtual Reality*.
- 2018 *Badstar*, Moss Arts Center Cube, Virginia Tech, Blacksburg, VA.
Performance of *Badstar*.
- 2017 3rd Electroacoustic Music Festival Ecos Urbanos, Mexico City, Mexico.

- Screening of *nothings_nomeanings*.
- 2017 International Composers and Interactive Artists *Fuse* concert, DiMenna Center for Classical Music, New York, NY
Screening of *What Bends*.
- 2017 Atlanterium AV Festival, Atlanta, GA
Screening of *nothings_nomeanings*.
- 2017 Moogfest, Durham, NC
Performance of *What Bends*.
- 2017 DISIS, Moss Arts Center, Blacksburg, VA
Screening of *What Bends*.
- 2017 What Bends, Moss Arts Center, Blacksburg, VA.
Performance of *What Bends*.
- 2017 Shimmer, Chapel Hill, NC
Installation of *nothings_nomeanings*.
- 2017 Beo String Quartet, Moss Arts Center, Blacksburg, VA.
Performance of *Or Be Forever Fallen*.
- 2016 Women's Work, Moss Arts Center, Blacksburg, VA
- 2015 Inlight, 1708 Gallery, Richmond, VA
Installation of *Circuits*.
- 2015 Currents New Media Festival, Santa Fe, NM
Screening of *nothings_nomeanings*.
- 2015 The Unstitute, online gallery
Screening of *nothings_nomeanings*.
- 2015 Community Room Presents: The Dog Days, 1708 Gallery, Richmond, VA
Performance of *The Architecture Sings II*
- 2015 Digital Media, Gloucester Arts, Gloucester, VA
Screening of *nothings_nomeanings*.
- 2014 Inlight, 1708 Gallery, Richmond, VA
Installation of *A Kind of Measure*.
- 2014 MFA Thesis Exhibition, The Depot, Richmond, VA
Installation of *nothings_nomeanings*.
- 2013 Game Play 2013, The Brick, New York City, NY

- 2013 Electronic Music Midwest, Kansas City Kansas Community College, Kansas City, KS.
Screening of *Relentless Spasms of Restrained Serenity*.
- 2013 Running Touching Pulsing Flashing, FAB Gallery, Richmond, VA
Installation of *Circuit*.
- 2013 *The Architecture Sings*, Art6, Richmond, VA
Performance of *The Architecture Sings*.
- 2012 *Observation Window*, 423 W. Broad St., Richmond, VA
Performance of *Observation Window*.
- 2012 Electro Acoustic Barn Dance Festival, University of Mary Washington, Fredericksburg, VA
Screening of *Relentless Spasms of Restrained Serenity*.
- 2011 International Exhibitions, Byte Gallery, Lexington, KY
Installation of *Modes of Destruction*.
- 2011 CSUF New Music Festival, California State University, Fullerton, Fullerton, CA
Installation of *Modes of Destruction*.
- 2010 Minimalism, Mills College, Oakland, CA
Performance of *St. Petersburg Waltz*.
- 2009 Sensorium, Langston Labs, San Francisco, CA
Installation of *Fragility of Permanence*.
- 2009 Signal Flow, Mills College, Oakland, CA.
Screening of *richter*.

SPONSORED RESEARCH

- 2023 *Experiencing Civil War History through Augmented Reality: Soldiers, Civilians, and the Environment at Pamplin Historical Park – Prototyping*.
PI: Paul Quigley. PI: Corrine Guimont, Todd Ogle, Douglas Bowman, Kurt Luther, David Hicks, Zach Duer, Thomas Tucker.
Funded by National Endowment for the Humanities.
\$100,000.
- 2023 *Dancing in the Air: Drones as Lighting for Live Performance*.
PI: Eric Handman. Co PIs: Zach Duer, Scotty Hardwig.
Funded by University of Utah Faculty Small Grant Program.
\$10,000.
- 2023 *Game Studies and Game Design Curriculum Development*.
PI: Zach Duer. Co PIs: Evan Lavender-Smith, Sang Won Lee, Michael Hsiao, James Ivory, Avery Wiscomb, Emmy Waldman, Dajana Nedic.

- Funded by Virginia Tech Institute for Creativity, Arts, and Technology.
\$24,500.
- 2023 *Epiphany Machine.*
PI: Julia Basso. Co PIs: Zach Duer, Scotty Hardwig.
Funded by Virginia Tech Institute for Creativity, Arts, and Technology.
\$24,500.
- 2022 *Game Studies and Game Design Curriculum Development.*
PI: Evan Lavendar-Smith. Co PIs: Wallace Santos Lages, Sang Won Lee, Michael Hsiao, Zach Duer, James Ivory, Avery Wiscomb.
Funded by Virginia Tech Institute for Creativity, Arts, and Technology.
\$21,628.
- 2022 *Faculty Teaching Group Grant.*
PI: Kyle Hutchins. Co PIs: Zach Duer, Amanda Nelson, Eiman Elgewely, Kay Edge, Natasha Staley, Jennifer Hand, Amelia Salisbury.
Funded by Virginia Tech Center for Excellence in Teaching and Learning.
\$2,000.
- 2021 *Experiencing Civil War History through Augmented Reality: Soldiers, Civilians, and the Environment at Pampling Historical Park – Development.*
PI: Paul Quigley. PI: Corrine Guimont, Todd Ogle, Douglas Bowman, Kurt Luther, David Hicks, Zach Duer, Thomas Tucker.
Funded by National Endowment for the Humanities.
\$30,000.
- 2021 *Artistic Exploration of Childhood Cognitive Development.*
PIs: Vanessa Diaz, Charles Nichols. Co PIs: Zach Duer, Erika Meitner, Ariana Wyatt.
Funded by Virginia Tech Center for Communicating Science.
\$5,000.
- 2021 *Nomadic Performance Technologies for Dance-Making in the 21st Century.*
PI: Eric Handman. Co PIs: Zach Duer, Scotty Hardwig.
Funded by University of Digital Matters Exhibition and Performance Faculty Grant.
\$5,000.
- 2020 *VRViewfinder: Engaging Bystanders in VR-based Interactive Media Using Auxiliary Viewing Devices.*
PI: Sang Won Lee. Co PI: Myoungsoon “Philart” Jeon, Zach Duer.
Funded by Virginia Tech Institute for Creativity, Arts, and Technology.
\$25,000.
- 2020 *Process and Interface for Remote Choreographic Devices.*
PIs: Zach Duer, Scotty Hardwig, Myoungsoon “Philart” Jeon.
Funded by Virginia Tech Institute for Creativity, Arts, and Technology.
\$7,800.

- 2019 *Time Garden*.
PI: Zach Duer, Scotty Hardwig, Charles Nichols.
Funded by Virginia Tech Institute for Creativity, Arts, and Technology.
\$11,400.
- 2019 *Square Dance Cubed*.
PI: Zach Duer. Co PI: Phyllis Newbill, Anne Elise Thomas.
Funded by Virginia Tech Institute for Creativity, Arts, and Technology.
\$3,000.
- 2018 *Body, Full of Time*.
PI: Zach Duer and Scotty Hardwig.
Funded by Virginia Tech Institute for Creativity, Arts, and Technology.
\$3,000.
- 2018 *Play to Make: A Creativity and Innovation transdisciplinary curriculum*.
PI: Zach Duer. Co PI: Jimmy Ivory, Katie MacDonald, Tacie Jones.
Funded by Virginia Tech Pathways Grant Program.
\$20,000.
- 2017 *Immersive Music Performance and Video Projection Mapping*
PI: Charles Nichols. Co PI: Zach Duer, Jonathan Rugh, André Foisey.
Funded by Virginia Tech Institute for Creativity, Arts, and Technology.
\$20,000.
- 2017 *Embodied Virtual Reality for Training and Performance*
PI: Todd Ogle. Co PI: Zach Duer, Robin Queen, Doug Bowman, Nathan Lau, Ico Bukvic, Stefan Duma.
Funded by Virginia Tech Institute for Creativity, Arts, and Technology.
\$25,000.
- 2017 *3D visualization and simulation of infectious disease spread*
PI: Bryan Lewis. Co PI: Zach Duer, Van Truong.
Funded by Virginia Tech Institute for Creativity, Arts, and Technology.
\$4,000.
- 2017 *Bringing Fossils Back to Life*
PI: Michelle Stocker. Co PI: Zach Duer, Tanner Upthegrove.
Funded by Virginia Tech Institute for Creativity, Arts, and Technology.
\$4,000.

JOURNAL ARTICLES

- 2020 Duer Z., Ogle T., Hicks D., Fralin S., Tucker T., Yu R (2020). Making the Invisible Visible: Bringing to Light the Hidden Histories of the World War I Tunnels at Vauquois Through a Hybridized Physical and Virtual Reality Exhibition. *IEEE Computer Graphics and Applications*, Vol 40 No. 4, pp. 39-50.

- 2018 Duer Z., Piilonen L., Glasson G.E (2018). Belle2VR: A Virtual Reality Visualization of Subatomic Particle Physics in the Belle II Experiment. *IEEE Computer Graphics and Applications*, Vol. 38 No. 3, pp. 33-43.

CONFERENCE PAPERS AND PRESENTATIONS

- 2023 Emmanuele E., Hunter D., Duer Z., Birch S. *dAnCing LiNes*. ACM Conference on Creativity and Cognition, online.
Published in the *C&C '23: Proceedings of the 15th Conference on Creativity and Cognition*
<https://dl.acm.org/doi/10.1145/3591196.3593511>
- 2022 Wang M., Duer Z., Hardwig S., Lally S., Ricard A., Jeon M. *Echofluid: An Interface for Remote Choreography Learning and Co-creation Using Machine Learning Techniques*. ACM Symposium on User Interface Software and Technology, Bend, Oregon. (Oct 29 – Nov 2).
- 2020 Piilonen L., Duer Z., & Glasson G.E. (2020). *Belle2VR: An interactive virtual reality visualization of GEANTS2 event histories*. Proceedings of the CHEP 2019 - 24rd International Conference on Computing in High Energy and Nuclear Physics, Adelaide, South Australia. (November 4-8)
- 2019 Duer Z., Hardwig S. *Body, Full of Time*. Paper panel presentation at Border Control, The New Media Caucus Symposium. Ann Arbor, MI. Also moderated panel: Border Crossings Between Human, Animal, and Technology. (September 20-22)
- 2019 Duer Z. *Educational Platforms for Immersive Student-Driven Learning*. Paper panel presentation at the College Art Association 2019 Annual Conference. New York, NY. (February 16)
- 2019 Piilonen L., Duer Z., Glasson G. *Belle II VR: A Virtual Reality Tool for Student Training in Subatomic Particle Physics*, National Academy of Sciences' Branches of the Same Tree: A National Convening on the Integration of Arts, Humanities, and STEMM in Higher Education, Washington, D.C. (April 12)
- 2019 Ogle J., Duer Z., Tucker T., Yu R., Hicks D., Bowman D., Quigley P., Cline D., Westman E. *Adventures in Visualizing History: A Case of Creative Transdisciplinary Work at Virginia Tech*, National Academy of Sciences' Branches of the Same Tree: A National Convening on the Integration of Arts, Humanities, and STEMM in Higher Education, Washington, D.C. (April 12)
- 2018 Duer Z., Piilonen L., Glasson G.E. *Belle2VR – A Virtual Reality Visualization of Subatomic Particle Physics in the Belle II Experiment*. IEEE Vis 2018, Berlin, Germany. (October 25)
- 2018 Yu R., Duer Z., Ogle T., Bowman D., Tucker T., Hicks D., Choi D., Bush Z., Ngo H., Nguyen P., Liu X. *Experiencing an Invisible World War I Battlefield Through Narrative-Driven Redirected Walking in Virtual Reality*. IEEE VR 2018, Reutlingen, Germany. (March 18)
Paper published in the *Proceedings of the IEEE Conference on Virtual Reality and 3D User Interfaces (VR)*, pp. 313-319.

- 2018 Hicks D., Ogle T., Duer Z., Tucker T., Choi D., Mullins R., Jagodzinski J., Pederson J., & Shelbourne S. *Virtual reality and immersive experiences of a Great War Battlefield*. Presentation at the annual conference of the National Council for the Social Studies, Chicago, Ill. (December 1)
- 2018 Johnson A., Hicks D., Ogle T., Duer Z., Tucker T., Choi D., Fralin S., Mullins R. *Design-Based and transdisciplinary research using mixed reality to teach about hard and hidden histories*. Symposium presentations at the annual conference of the College and University Faculty Assembly (CUFA) of the National Council for the Social Studies (NCSS), Chicago, Ill. (November 30)
- 2018 Ogle T., Hicks D., Tucker T., Choi D., Duer Z. *If This Place Could Talk: The Lost Village of Vauquois*. American Educational Research Association, New York, NY (April 17)
- 2017 Duer Z., Piilonen L., Glasson G.E. *Belle2VR – A Virtual Reality Visualization of Subatomic Particle Physics in the Belle II Experiment* (shortened presentation). IEEE Vis 2017, Phoenix, AZ. (October 2)
- 2017 Glasson G.E., Piilonen L., Spytek S., Dobson C., Barber J., Duer, Z. *Particle Physics Virtual Reality Project at Virginia Tech*. Virginia Association of Science Teachers, Roanoke, VA (November 16)

COURSES TAUGHT

Virginia Tech

| | |
|-----------------|--|
| ART 1114 | Play to Make |
| ART 2434 / 5714 | Creative Coding |
| ART 2604 | Intro to Creative Technologies |
| ART 3504 | Intro to Game Development |
| ART 3504 / 5604 | Visual Programming |
| ART 4504 / 5604 | Virtual Environments |
| ART 4504 / 5604 | Advanced Creative Coding |
| ART 4514 / 5714 | Electronic Performance and Installation |
| ART 4894 | Senior Studio |
| ART 4514 | Visual Music |
| ART 5524 | Graduate Seminar |
| ART 5534 | Graduate Art Critique |
| UH 3004 | Immersive Environments for Art, Data, and Research |
| UH 3504 | Movement and Media |
| UH 4984 | Intro to Game Design and Game Studies |

Student evaluations

Overall effectiveness average: 5.68 / 6.00

Department average: 5.29 / 6.00

College average: 5.19 / 6.00

Virginia Commonwealth University

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| KINE 208 | Introduction to Computer Techniques |
| KINE 291 | Projection Mapping |
| KINE 291 | Max/MSP/Jitter |
| KINE 291 | Processing |
| KINE 291 | Motion Capture |
| KINE 338 | 3D Computer Animation I |
| KINE 438 | 3D Computer Animation II |
| KINE 491 | Programming in Unity |

John Tyler Community College

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|---------|--------------|
| ART 203 | Animation I |
| ART 204 | Animation II |

Mills College

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| MUS 003 | Musicianship I [TA, Instructor of Record] |
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THESIS ADVISING

PhD

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|-------------|--|
| 2018 - 2022 | <i>PhD Dissertation Advisor</i> , Woohun Joo, Interdisciplinary PhD. Dissertation Title: <i>Experiential Graphic Sonification for Visual and Auditory Communication Design and Musical Expression</i> |
| 2018 - 2020 | <i>PhD Dissertation Chair</i> , Michael Rhoades, Interdisciplinary PhD. Dissertation Title: <i>Composing Holochoric Visual Music: Interdisciplinary Matrices</i> |

MFA

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|-------------|---|
| 2022 - 2023 | <i>MFA Thesis Advisor</i> , Shiven Saxena, MFA Creative Technologies. Thesis Title: <i>Fragmented Self</i> |
| 2022 - 2023 | <i>MFA Thesis Chair</i> , Clare Suess, MFA Creative Technologies. Thesis Title: <i>Make This Make Sound</i> |
| 2022 | <i>MFA Thesis Advisor</i> , Nikita Shokhov, MFA Creative Technologies. Thesis Title: <i>Orientation Device</i> |
| 2022 | <i>MFA Thesis Chair</i> , Adam Eddy, MFA Creative Technologies. Thesis Title: <i>Liminal Perspective</i> |

- 2022 *MFA Thesis Chair*, Joe Link, MFA Creative Technologies.
Thesis Title: *Ocean of Objects*
- 2022 *MFA Thesis Advisor*, Nicholas Corrigan, MFA Creative Technologies.
Thesis Title: *Transitions of Light: Creating in the Post Digital, Approaching Post Pandemic*
- 2021 *MFA Thesis Advisor*, Boyoung Lee, MFA Creative Technologies.
Thesis Title: *Breeze*.
- 2020 - 2021 *MFA Thesis Chair*, Tianyu Ge, MFA Creative Technologies.
Thesis Title: *Encyclopaedia Mundi: A digital experience*
- 2020 – 2021 *MFA Thesis Advisor*, Caleb Flood, MFA Creative Technologies.
Thesis Title: *Desubjectification and Ritual Process*
- 2020 - 2021 *MFA Thesis Advisor*, Jasmine Shah, MFA Creative Technologies.
Thesis Title: *The Joys of Gardening*
- 2020 *MFA Thesis Advisor*, Renee Alarid, MFA Creative Technologies
Thesis Title: *Propolis: Immersive Environment*
- 2019 *MFA Thesis Chair*, Hannah Comstock, MFA Creative Technologies.
Thesis Title: *Devisceris*
- 2019 *MFA Thesis Chair*, Daniel Monzel, MFA Creative Technologies.
Thesis Title: *Fabricated Preservation*
- 2019 *MFA Thesis Advisor*, David Franusich, MFA Creative Technologies.
Thesis Title: *Down Stream [Appalachia]*
- 2019 *MFA Thesis Advisor*, Jasmine Edison, MFA Creative Technologies.
Thesis Title: *Sankofa: Artist As Historian, Scavenger, and Storyteller*
- 2019 *MFA Thesis Advisor*, Mahshid Gorjian, MFA Creative Technologies.
Thesis Title: *The Battle of the Kings*
- 2018 - 2019 *MFA Thesis Advisor*, Carter Eggleston, MFA Creative Technologies.
Thesis Title: *Plasticene*
- 2018 - 2019 *MFA Thesis Advisor*, Xindi Liu, MFA Creative Technologies.
Thesis Title: *The Ashes and the Portal*
- 2017 - 2018 *MFA Thesis Chair*, Lucas Freeman, MFA in Creative Technologies.
Thesis Title: *Alchemically: An Educational Role-Playing Game.*
- 2017 - 2018 *MFA Thesis Advisor*, Lei Zhang, MFA in Creative Technologies.
Thesis Title: *Immunology Virtual Reality: Exploring Educational VR Experience Design for Science Learning.*

2017 - 2018 *MFA Thesis Advisor, George Hardebeck, MFA in Creative Technologies.
Thesis Title: Pulse 63: Live Streaming and Architectural Projection Mapping at Moogfest
2018.*

BFA

2023 *Undergraduate Senior Mentor, Jacob Chartier, BFA Creative Technologies.*

2022 - 2023 *Undergraduate Senior Mentor, James Kiskaden, BFA Creative Technologies.*

2022 - 2023 *Undergraduate Senior Mentor, Ishraq Quasem, BFA Creative Technologies.*

2021 - 2022 *Undergraduate Senior Mentor, Sam Lally, BFA Creative Technologies.*

2021 - 2022 *Undergraduate Senior Mentor, Andrew Cybak, BFA Creative Technologies.*

2021 - 2022 *Undergraduate Senior Mentor, Bryan Snigur, BFA Creative Technologies.*

2021 *Undergraduate Senior Mentor, Noelle Badzik, BFA Creative Technologies.*

2020 - 2021 *Undergraduate Senior Mentor, Xzavier Cypress, BFA Creative Technologies.*

2020 - 2021 *Undergraduate Senior Mentor Brady Blauvelt, BFA Creative Technologies.*

2020 - 2021 *Undergraduate Senior Mentor, Daniel Gray, BFA Creative Technologies.*

2020 *Undergraduate Senior Mentor, Ross Walter, BFA Creative Technologies.*

2019 - 2020 *Undergraduate Senior Mentor, Aidun Aurash, BFA Creative Technologies.*

2019 – 2020 *Undergraduate Senior Mentor, Hailey Hartigan, BFA Creative Technologies.*

2019 - 2020 *Undergraduate Senior Mentor, Madison Hermann, BFA Creative Technologies.*

2018 - 2019 *Undergraduate Senior Mentor, Tariq Rakha, BFA Creative Technologies.*

2018 - 2019 *Undergraduate Senior Mentor, Tara Laughlin, BFA Creative Technologies.*

2018 - 2019 *Undergraduate Senior Mentor, Kyle Robey, BFA Creative Technologies.*

2018 - 2019 *Undergraduate Senior Mentor, Rachel Oliu, BFA Creative Technologies.*

2017 - 2018 *Undergraduate Senior Mentor, Karsten Dees, BFA Creative Technologies.*

2017 - 2018 *Undergraduate Senior Mentor, Michael Rhoades, BFA Creative Technologies.*

2017 - 2018 *Undergraduate Senior Mentor, Vincent Riddell, BFA Creative Technologies.*

2017

Undergraduate Senior Mentor, Tyler Niskanen, BFA Creative Technologies.

COURSES WRITTEN

ART 1114 Play to Make: Introducing the Materials, Tools, and Processes of Creative Technologies + Experiences

2018, course developed as part of Creative Technologies and Experiences Pathways minor.

Description: Transdisciplinary practice in an inclusive, collaborative environment, through the lens of creative technologies and experiences, to describe and evaluate the convergence between art, technology, and human experience in the arts, sciences, humanities, and engineering. Exploration of play for creation of ideas and artifacts (including, but not restricted to multimedia narratives, learning simulations, immersive/performative experiences, and data exploration). Inclusive collaboration with peers and practicing professionals in diverse fields. Critical consideration of creative technologies and the impacts on history, society, cultures, individuals, and communities. Collaborative research, design, creation, and exhibition of a transdisciplinary project to identify and address a global challenge.

ART 2434 Introduction to Creative Code

2021, course developed as required course in new Creative Technologies BFA

Description: Introduction to computer programming tools within a critical aesthetic context. Tools may include software such as Processing and Unity. Application of foundational programming techniques to artwork creation. Consideration of computational and quantitative technologies and processes ethically, culturally, and artistically. Algorithmic thinking, and examination of existing computer generated artworks to infer algorithmic basis. Consideration of the ethics of algorithmic systems in our culture and media.

ART 3114 Creative Coding for Creativity and Innovation

2018, course developed as part of Creative Technologies and Experiences Pathways minor.

Description: Introduction to computer programming tools within a critical aesthetic context. Creation and analysis of generative and algorithmic artwork as well as consideration of how works derived from logical rulesets, algorithms, and the artful application of randomness can communicate human feelings and ideas. Consideration of ethics of algorithmic systems in our culture and media, and creating art works to address those issues and influence opinion.

ART 5534 Graduate Art Critique

2019, course developed to expand graduate offerings in the School of Visual Art.

Description: Graduate level presentation, analysis, and critique of art works and interdisciplinary artistically-led projects, including but not limited to video art, videogames, virtual reality and augmented reality environments, 3D animated short films, scientific visualization, socially engaged performance art, physical computing installations, digital fabrication and manufactured art, and graphic design. Informal and formal critiques performed by peers, guest faculty, and guest artists.

(In governance)

ATS 1xxx – Introduction to Game Design and Game Studies

2023, course developed as gateway to a potential transdisciplinary minor in Game Design and Game Studies.

Description: Transdisciplinary introduction to key theories and practices in the design and study of games. Focuses on video games. Game logic and rapid prototyping, game components and systems,

social and ethical dimensions of games, game interfaces and user experience design, and ludology and narrative theory. Study existing games and rapid prototyping methods to create simple digital and tabletop games.

VIRGINIA TECH UNIVERSITY SERVICE

- 2023 – Director, Creative Technologies MFA Program.
- 2023 – Promotion and Tenure Mentor, Creative Technologies program faculty.
- 2022 – 2023 Member, Faculty Search Committee, Assistant Professor of Creative Technologies.
- 2022 Interim Program Chair, Graphic Design, School of Visual Arts.
- 2021 Interim chair, Curriculum committee, School of Visual Arts.
- 2020 – Member, Honorifics Committee, College of Architecture, Arts, and Design.
- 2019 – Member, Master’s in Human Computer Interaction program creation working group.
- 2019 Member, Non-Tenure Track Promotion Committee, School of Visual Arts
- 2018 – Member, Curriculum Committee, School of Visual Art
- 2018 – Member, Admissions Committee, Creative Technologies MFA Graduate Program
- 2018 – 2019 Member, Faculty Search Committee, Collegiate Assistant Professor in Technology, Creativity, and Innovation – University Honors College.
- 2018 – 2019 Member, Faculty Search Committee, Assistant or Associate Professor of Creative Technologies and Interdisciplinary 3D Media, School of Visual Arts.
- 2018 – 2019 Member, Cubefest 2019 organization committee.
- 2018 Chair, Curriculum Committee, Creativity and Innovation Destination Area.
- 2017 Member, Faculty Search Committee, Assistant Professor of Movement, Performance, and Integrated Media - School of Performing Arts
- 2017 Member, Faculty Search Committee, Research Assistant Professor in Immersive Environments, ICAT, Virginia Tech

PROFESSIONAL SERVICE

- 2023 Conference Reviewer, a2ru 2023 What’s Next?: Imagining New Educational Futures for Ourselves, Our Communities, and our Planet.
- 2023 Juror, New Media Caucus 2023 Vagner Mendonça-Whitehead Microgrant Award.

- 2022 Juror, Future Bodies exhibition, the 2022 New Media Caucus Symposium and Exhibition.
- 2020 – Member, Executive Board, New Media Caucus.
- 2020 – Member, Editorial Board, a2ru Ground Works.
- 2020 – 2022 Co-chair, Steering Committee, Future Bodies, the 2022 New Media Caucus Symposium and Exhibition.
- 2020 External Reviewer, Ground Works, a2ru’s online compendium.
- 2019 External Reviewer, Visual Resources: A Journal on Images and their Uses, Vol. 35, 2019. Ed. Barbara Pezzini.
- 2018 – 2019 Member, Border Control Communications Committee, the 2019 New Media Caucus Symposium and Exhibition.
- 2018 Juror, Best Installation Award, New Interfaces for Musical Expression.
- 2017 – 2018 Member, Special Programs and Telematics Committee, New Interfaces for Musical Expression 2018 conference.

INVITED PRESENTATIONS

- 2023 *Digerati LLP Guest Lecture.*
Virginia Tech, Blacksburg, VA.
- 2021 *Artists Panel.*
Screen Dance International, online.
- 2019 *Data Visualization.*
Moss Arts Center, Virginia Tech, Blacksburg, VA.
- 2018 *Artist Talk.*
New Media Caucus Annual Meeting, Hunter College, NYC, NY.
- 2016 *Keynote.*
Southwest Virginia STEM Summit, Virginia Tech, Blacksburg, VA.
- 2013 *Artist Talk.*
Alfred University, Alfred, NY
- 2009 *Artist Talk.*
University of California Davis, Davis, CA

WORKSHOPS, OUTREACH, ENGAGEMENT

- 2023 *Interactive Dance Performance and the Screen.*
American College Dance Association Third Annual National Screendance Festival.
- 2018 Installed *Exploring America's Forgotten War* virtual reality history education platform in Blacksburg Middle School.
- 2016 *ICAT: Introduction to the Cube and Immersive Virtual Environments*
Networked Learning Initiatives, Virginia Tech, Blacksburg, VA
- 2015 *Introduction to Videogame Level Design*
Virginia Commonwealth University Summer Intensive, Richmond, VA
- 2015 *Multi-channel video installation,*
Department of Photography and Film, Virginia Commonwealth University, Richmond, VA
- 2015 *Absolute Beginner Programming with Processing*
HackRVA, Richmond, VA
- 2015 *ALTFest Makers Fair*
Virginia Commonwealth University, Richmond, VA
- 2014 *Introduction to Videogame Level Design*
Virginia Commonwealth University Summer Intensive, Richmond, VA