

FRED LEIGHTON

Department of Communication
University of Wisconsin-Whitewater
Whitewater, WI 53190-1790
leightof@uww.edu
<https://www.artsdigital.com>

CURRENT POSITION

Assistant Professor, Department of Communication, University of Wisconsin-Whitewater

EDUCATION

M.Sc. Digital Media, Georgia Institute of Technology, May 2012

M.F.A. Interactive Design & Game Development, Savannah College of Art & Design, June 2006

B.A. History of Art, University of Michigan-Ann Arbor, August 1988

PUBLICATIONS

"You Can Get There From Here – Creating 3D models with Photorealistic textures from the e57 file format." *MW21: MW 2021*. Published January 29, 2021. Consulted June 22, 2021. <https://mw21.museweb.net/paper/you-can-get-there-from-here-creating-3d-models-with-photorealistic-textures-from-the-e57-file-format/>

"Developing Mobile Augmented Reality with Unity and Vuforia." *MW20: MW 2020*. Published March 30, 2020. Consulted June 4, 2021. <https://mw20.museweb.net/paper/developing-mobile-augmented-reality-with-unity-and-vuforia/>

Kuper, Ksobiech, Wickert, Leighton, Frederick. "An Exploratory Analysis of Increasing Self-Efficacy of Adults with Autism Spectrum Disorder Through the Use of Multimedia Training Stimuli." *Cyberpsychology, Behavior, and Social Networking, Special issue: VR and Autism*, 2019. Published November 6, 2019, Ahead of Print. Consulted December 1, 2019. <https://www.liebertpub.com/doi/10.1089/cyber.2019.0111>

"The portARble museum: Developing Augmented Reality for the Web using AR.js." *MW18: MW 2018*. Published January 15, 2018. Consulted December 30, 2018. <https://mw18.mwconf.org/paper/the-portarble-museum-developing-augmented-reality-for-the-web-using-ar-js/>

Leighton, Mazalek, Rebola. "Tangible Synergetic Domes" Work in Progress. *Seventh International Conference on Tangible, Embedded, and Embodied Interaction*. February 2013.

PUBLICATIONS (cont.)

Mazalek, Welsh, Nitsche, Clifton, Leighton. "Lasting Impression: Interaction With Embodied Puppet Leads to Changes in the Way People Draw Sketches" Work in Progress. *Seventh International Conference on Tangible, Embedded, and Embodied Interaction*. February 2013.

Mazalek, Welsh, Nitsche, Reid, Clifton, Leighton, Tan. "Reach Across the Boundary: Evidence of Physical Tool Appropriation Following Virtual Practice" *Seventh International Conference on Tangible, Embedded, and Embodied Interaction*. February 2013.

RESEARCH

Leighton. "cryptocARency: Ambient User Interface with Mobile Web AR" 2018.

Leighton. "Tangible Cryptocurrency" 2017.

CONFERENCE PRESENTATIONS

"You Can Get There From Here - Creating 3D models with Photorealistic textures from the e57 file format."

How-To Session. MW21: Museums and the Web 2021, 25th Annual Conference, Online.

"Developing Mobile Augmented Reality with Unity and Vuforia"

How-To Session. MW20: Museums and the Web 2020, 24th Annual Conference, Online.

"Augmented Reality for the Mobile Web"

Presentation. 2019 Celebrating Teaching and Learning Conference, Whitewater, WI.

"The portARble museum, Developing Augmented Reality for the Web using AR.js"

How-To Session. MW18: Museums and the Web 2018, 22nd Annual Conference, Vancouver, B.C., Canada.

Hands-On Demonstration. MCN 2018, 51st Annual Museum Computer Network Conference, Denver, CO.

"Tangible Synergetic Domes" Work in Progress. Seventh International Conference on Tangible, Embedded, and Embodied Interaction, 2013, Barcelona, Spain.

CONFERENCE PLANNING

Review and Evaluation of Session Proposals. MCN 2017, 50th Annual Museum Computer Network Conference, Pittsburgh, PA.

CONFERENCES ATTENDED

Siggraph 2020, ACM Conference, Computer Graphics and Interactive Techniques, Online

Siggraph 2019, ACM Conference, Computer Graphics and Interactive Techniques, Los Angeles, CA

Siggraph 2018, ACM Conference, Computer Graphics and Interactive Techniques, Vancouver, B.C., Canada
Siggraph 2017, ACM Conference, Computer Graphics and Interactive Techniques, Los Angeles, CA

Siggraph 2016, ACM Conference, Computer Graphics and Interactive Techniques, Anaheim, CA

UIST 2016, ACM Conference, User Interface and Software Technology, Tokyo, Japan

SELECTED SOLO EXHIBITIONS

The Secret of Bigfoot Pass, Secor Gallery, Toledo, OH, 2009.

Dynamic Variations, MFA Thesis Exhibition and Performance, Orleans Hall, Savannah, GA, 2005.

SELECTED GROUP EXHIBITIONS

100 x 100, Triangle Arts Association, New York, NY, 2011.

iDEAs 07: Beyond Boundaries, The F.U.E.L. Collection, Philadelphia, PA, 2007.

55th Annual BGSU Faculty Exhibition, Dorothy Uber Bryan Gallery, Bowling Green, OH, 2007.

COMMITTEES

Assessment, MAGD program, 2016-present.

Research Across Curriculum, Interdisciplinary Group of Faculty for supporting the inclusion of research in undergraduate courses throughout UW-Whitewater. 2018-19.

Job Search, Assistant Professor in Media Arts and Game Development Program, Communication Department, 2017-18.

Planning Committee. MCN 2017, 50th Annual Museum Computer Network Conference, Pittsburgh, PA.

COMMITTEES (cont.)

Scholarship, Communication Department, 2017-present.

Job Search, Assistant Professor in Journalism, Communication Department, 2016-17.

MAGD Expo, Media Arts and Game Development Program, Communication Department, 2016-17

Visiting Artist, College of Art and Communication, Fall 2016, Fall 2019-present.

COURSES TAUGHT

Assistant Professor, and Lecturer, Media Arts and Game Development Program, Communication Department, College of Arts and Communication, University of Wisconsin-Whitewater, 2015-present.

MAGD 150: Introduction to Media Arts and Game Development

MAGD 270: Web Development

MAGD 271: Interactive Communication

MAGD 487: Senior Capstone I

COMM 294: Gaming Journalism Website

COMM 496: Special Studies, Augmented Reality for the Mobile Web

COMM 498: Independent Study: Project Management, Mobile VR, Interaction Design

Adjunct Instructor, School of Literature, Media and Communication, Georgia Institute of Technology, 2012-2014.

LMC 3206: Communication and Culture

LMC 2720: Visual Design

LMC 3705: Information Design

Instructor, Visual Communications Technology Department, College of Technology, Bowling Green State University, 2008-2010.

VCT 3040: Display, Exhibition Technology

VCT 3660: Intermediate Interactive Development

VCT 4600: Digital Photography (Software)

COURSES TAUGHT (cont.)

Instructor, Digital Arts Department, School of Art, Bowling Green State University, 2007-2008.

ARTC 201: Introduction to Digital Arts

ARTC 321: Digital Imaging

ARTC 331: Interactive Art

COURSES DEVELOPED

Assistant Professor, and Lecturer, Media Arts and Game Development Program, Communication Department, College of Arts and Communication, University of Wisconsin-Whitewater, 2015-present.

COMM 496: Special Studies, Augmented Reality for the Mobile Web. Spring 2019.

GRADUATE THESIS COMMITTEES

Gregory Kuper, University of Wisconsin-Whitewater. "Autism in the Workplace: Testing the Self-Efficacy of Adults With Autism Spectrum Disorder When Using New Media as a Mediated Training Stimuli." Received Master of Science in Communication, Mass Communication, Spring 2018.

RESEARCH FUNDING

Research Across Curriculum, Interdisciplinary Group of Faculty for supporting the inclusion of research in undergraduate courses throughout UW-Whitewater. 2018-19. \$2000 stipend.

Emerging Technology Exploration. UW-Whitewater, Learning Technology Center. Spring 2017. \$3000 for purchase of Microsoft HoloLens.

AWARDS AND REVIEWS

The Art of the Motorcycle. Award Winner, INTERACTION 2003, PRINT Magazine Interactive Design Competition. Outstanding Achievement Award, 2002 HOW Interactive Design Competition. CD-ROM Producer. Guggenheim.com. (NYC) 2001. Online version. 2002 Webby Award Winner – Broadband.

FINSTERACTIVE. CD-ROM on Rev. Howard Finster, acclaimed Outsider Artist. Received notice in WIRED (11/98), Mac Art & Design (Spring '99), and Feed (3/99). Fred Leighton Digital Media. 1998.

GRADUATE ASSISTANTSHIPS

Online Projects, Dean's Office, Ivan Allen College of Liberal Arts, Georgia Institute of Technology, 2012.

Augmented Environment Lab, Georgia Institute of Technology, 2010-11.

NEW MEDIA INDUSTRY AND MEDICAL EDUCATION WORK HISTORY

Guggenheim.com (NYC), 2001. Producer, Developer. Authored interactive media for *The Art of the Motorcycle*, stand-alone and website versions of award-winning title. Created and Implemented project plans; Directed interactive designers and content producers. Created production schedules for website. Managed customized software application for delivering streaming media.

Braincraft (NYC), 2000. Technical Project Manager. Created budgets and proposals, Managed production and resources for online projects. Acted as company interface for clients, communicating project status.

Churchill Communications (NJ), 1999 - 2000. Producer. Managed and Developed new media projects and online content for pharmaceutical industry clients. Created and maintained production schedules, and allocated resources for projects. Estimated resource requirements and Created budgets for proposed projects.

Center for Creative Instruction, Health Science Campus at The University of Toledo (OH), 1994-98. Coordinator, Digital Media Specialist. Collaborated with faculty, Organized and Lead production teams for Medical Education new media projects.

SOFTWARE / HARDWARE SKILLS

Communication, Online, Blended and Remote Learning

Canvas

Cisco Webex

Microsoft Teams

Google Hangouts, Drive

Sound Design

Pro Tools

Reason

Abelton Live

Design, Layout

InDesign

Illustrator

SOFTWARE / HARDWARE SKILLS (cont.)

Video

Premiere, After Effects

Interactive, Web, Image

Photoshop

Animate, AS 3.0

Dreamweaver

HTML5, CSS3

Web App Development

Mobile Web Development

AR, VR

Mobile Web AR

A-Frame, AR.js

Google Cardboard, Daydream

Microsoft HoloLens

Vuforia

Fabrication

Laser Cutter

3D Printer

Programming, Scripting

Xcode

Processing, P5.js, JAVA

JavaScript, jQuery

XML

MAX

R

3D

MAYA

Blender

SketchUp

Unity

RealityCapture

Microcontrollers

Arduino

Circuit Playground Express

Huzzah ESP8266

Tangible Interfaces

reactIVision