UNTETHERED

Submitted on March 7, 2019 - 10:00am

Joe Costello, ARCAD - Augmented Reality Computer aided Design, MDes Thesis, 2018

EXHIBITION

March 11–18, 2019
Jacob Lawrence Gallery

Reception: Tuesday, March 12, 5:30–7:30pm

"Creative Immersion" talk by Professor Thomas A. Furness: Tuesday, March 12, 7:30pm in room 327/329

Untethered showcases recent augmented reality and virtual reality (AR/VR) projects from students in the Paul G. Allen School of Computer Science & Engineering (CSE) and the Interaction Design (IxD) Program in the Division of Design, School of Art + Art History + Design.

AR/VR marks a new frontier in the visualization and experience of three-dimensional (3D) content. Commercially available head-mounted displays such as Microsoft's HoloLens and Oculus Go make advanced 3D displays available to the general public so that we can now imagine displays without borders, screens that are not constrained by rectangular frames, three-dimensional holograms that serve as augmented visual structure and novel interaction elements, and, ultimately, a mixed reality that integrates virtual elements into physical environments.

What are the new immersive experiences that designers, artists, and technologists are currently creating that will transform head mounted displays into the line of sight interface of the future?

At the intersection between CSE and IxD, Untethered displays work that is currently being or has recently been developed by students of Principal Lecturer Barbara Mones (CSE) and Associate Professor Axel Roesler (IxD).

Projects in the exhibition include student work from CSE 490J: three VR experiences of a virtual orca pod titled
"J K L" (dedicated to the critically endangered Pacific Northwest orca pods); Jackie Hu, Kevin Wang, Brian Wang, and Blake Rizzo present an immersive VR experience, "Untethered," that transforms a 3D-printed orca in the gallery space into an undersea experience; and Sophia Baker and Casey Jo Grosso present a wall of swimming Orcas, "Pools," that combines 3D computer graphics and stop motion. Phillip Carpenter presents a VR Demo of tactile interaction, "The Space Between Two Perceptions."

"Woodworking in Augmented Reality" is an IxD master's thesis in progress by Derek Burkhardsmeier. Additional recent IxD master's thesis projects include Joe Costello's "ARCAD" and Tate Strickland's "Museum Voice," on display as video prototypes.

Mones and Roesler intend the exhibition to be viewed as an experiment in progress, as a display of work that is ongoing and captured as a snapshot that points to the future. David Hunt and Natalie Burke, both from Unity Technologies, serve as consultants on the VR Projects. VR Projects were supported in part by the UW Reality Lab Studio. Staff member Sophia Baker also receives support from the Reality Lab Studio.

PROJECTS

COMPUTER SCIENCE & ENGINEERING

JKL

J

• Paul Yoo
• Rebecca Haynes
• Alice Chen
• TA: Jackie Hu

K

• Sharanya Sudhakar
• Sherry Yang
• Dana Spillinger
• Jialiang Liu
• TA: Teng Yue

L

• Phillip Carpenter
• Ellie Derocher
• Jose Pacio
• Gabriela De Vincenso
• TA: Andrew Rudasics

POOLS

• Sophia Baker
• Casey Jo Grosso

UNTETHERED

• Jackie Hu
• Kevin Wang
• Brian Wang
• Blake Rizzo
• Ada Pyszkiewicz

INTERACTION DESIGN

PHILLIP CARPENTER

"The Space Between Two Perceptions," 2019

DEREK BURKHARDSMEIER

"Woodworking in Augmented Reality," 2019
JOE COSTELLO

"ARCAD - Computer Assisted Design in Augmented Reality," 2018

TATE STRICKLAND

"The Museum Voice," 2017