



PennImmersive Open House

November 7, 2018

Blue Visual Effects – VR Relaxation

11AM-2PM

Howard McCabe, Ben Carter, Matt Tidridge

Blue Visual Effects creates AR and VR experiences like the recent Mural Arts of Philadelphia, Josh Mays Mural AR, and a VR representation of it. Try the Penn Medicine VR Relaxation Experience that is currently installed at Proton Therapy Center.

Dell

11AM-2PM

Dennis McClatchy and Mitch Paris

See the new VR capable workstations and your IoT solutions.

Nanome

11AM-2PM

Jarrell James and Tate Chan

Experience scientific collaboration and molecule design at the nanoscale.

ImmersiveXR

11AM-2PM

Adam Twersky, Michael Johnston, Lee Souder, Max Cohen, Dan Silva

ImmersiveXR will be on site with their popular boxing installation. Visitors will strap on boxing gloves and an HTC Vive headset, and then start smashing a virtual robot to pieces. Hard to explain, easy to enjoy!

Adobe Creative Cloud Mobile and Immersive Technologies

11AM-2PM

Steve Hart

Adobe will be demonstrating: Creative Cloud's mobile capabilities, 3D scenes with Adobe Dimension, Character animator, and discussing Project Aero, Adobe's AR tool that will be released next year.

The Heart of Puerto Rico:

A Virtual Reality Film About Artists in Puerto Rico After Hurricane Maria

11AM-2PM

Peter Decherney

Look at the raw footage from a virtual reality film shot in Puerto Rico this summer. We filmed famous sculptors, street performers, drag queens, and even the governor of Puerto Rico. The project was sponsored by a Making A Difference in Diverse Communit grant from the School of Arts and Sciences. We will also have some of our earlier virtual reality film work available.

Narcan Administration Simulation

Can immersive video be an effective training method to administer an opioid reversal agent?"

11AM-2PM

Kyle Cassidy

Members of the Penn Working Group on Virtual Reality teamed up with the Nursing School to produce an immersive video demonstrating how to administer the opioid drug Narcan. Previously training classes had to be done in person where attendees would witness a simulated drug overdose and response. We wrote a script, hired actors, and created a 360 video that allows this training to be distributed easily and cost effectively with google cardboard / oculus go. The first study trials of our results begin Tuesday 10/9/2018.

CPReality

11AM-2PM

Shaun McGovern, Marion Leary

CPReality is an augmented reality application designed to improve CPR quality of healthcare providers by providing real-time feedback via visualization of blood flow to the heart and brain during a cardiac arrest.

EC TinkerLab: Makerspace @ Penn Libraries' Education Commons

11am-2pm

Chava Spivak-Birndorf and Meaghan Moody

Meet the EC TinkerLab! The brand new makerspace at Penn Libraries' Education Commons is a place for all tinkerers, whether you are working on your latest invention, looking to get your hands on emerging tech for the first time, or in the mood for some low-tech crafting! The TinkerLab has an exciting collection of immersive tech tools and toys for learning, experimenting, and making, including 3D printers and scanners, AR/VR tools, robotics, and more. Stop by to meet the librarians, learn about the space, and of course, play with the tech!

SyGlass VR

11AM-2PM

Michael Stauffer

syGlass is a commercial VR program that enables intuitive viewing and analysis of 3D image volumes. The demo will allow users to try the software to view high definition CT scans

Using 3D Prints in a Museum Context

11AM-2PM

Stephen Lang, Joshua T. Lessard, Megan Becker, and Benjamin Neiditz

The Penn Museum is exploring three new ways to apply 3D scanning and 3D printing in a museum context. One such use is to create models of our artifacts that the public can touch. These interactive models are fun, and have multi-sensory benefits for visitors with disabilities. Another use is to produce casts of museum objects that are too fragile to manipulate by hand. These include ancient cylinder seals and molds. We also work with classroom educators to help students create digital models of artifacts to help build skills related to photogrammetry and basic file editing. Find the museum's 3D models on Sketchfab and in our online collection.

Unity Basics Workshop Series

11AM-2PM

Sasha Renninger and Caroline Lachanski

Stop by for a preview of the workshops series and training materials being developed to help students bring their 3D models into Unity for use in the Oculus Rift and HoloLens.

Virtual Hand Illusion

11AM-2PM

Alex Miller

The Penn Neurology VR Lab is a resource for faculty, staff, and students who wish to utilize XR technology for research. The Virtual Hand Illusion is one of many active projects in the lab. It explores how VR can convince subjects that their real hands aren't where they think they are.

ENIAC at Penn Pop-Up Exhibit

11AM-2PM

Holly Mengel and Kayt Ahnberg

Don't miss these treasures from the Kislak Center for Special Collections, Rare Books, and Manuscripts! Stop by and check out punch cards, circuit boards, and other collection highlights related to the inventor of the Electronic Numerical Integrator and Computer (ENIAC), the first general-purpose electronic computer.

3D Scanning @ Fine Arts Library: 11am-2pm

11AM-2PM

Hannah Bennett, Patty Guardiola, and Coral Salomón

See the new 3D scanner and explore how materials and textures can be integrated into your next mixed reality project!

Fantasy and Reality: Experiments with VR in Archaeological Reconstruction

12PM-2PM

Malika Okech

My project is a case study in using 3D modeling and Virtual Reality to explore archaeological reconstruction. I am using data from June 2018 participation in the Vayots Dzor Fortress Landscapes Project (VDFLP), building a medieval hilltop fortress surveyed during the season. I used UAV (unmanned aerial vehicle) photographs and photogrammetry to produce an initial model of the hill, and have been using comparative archaeological research to inform my decisions in creating the 3D model. The goal of the project is to examine both the merits of 3D reconstruction, and the usefulness of Virtual Reality for archaeological research.

The Simpl framework!

1-2PM

Joe Lee

Developed by the J. Alfred West Learning Lab and now available via Open Source, Simpl is a framework that allows a developer to easily create both single and multiplayer simulations and games.

Mixed Reality in Cardiac Surgery: An Initial Assessment

1-2PM

Ahmed Aly, Robert Groman

The surge in technological development has yielded advances in imaging and image analysis capabilities. Although large amounts of data from imaging is available, a challenge for the surgeon is to be able to interact with the data intraoperatively. In most cases, interaction with images or image-derived models ends with the pre-operative planning. Although there are many screens in the operating room, interacting with the screens can be difficult, requires coordination of the surgeon with the surgical team and does not allow the surgeon to directly interact with data. Mixed reality offers an alternative for surgeons to interact with data directly without violating the sterile field and offers the additional benefit of visualizing and interacting with 3D models. The objective of this study was to assess and review the feasibility and potential of a mixed reality device, HoloLens, for the operating room.

Bio-Inspired Robotics

1-2PM

Meghna Gummadi and Rosalind Shinkle

We build robots inspired by animal locomotion. We strongly believe legs are better than wheels.

Zappar & ZapBox

11AM-2PM

Use the app to explore mobile AR and mixed reality experiences that you can create here at the Penn Libraries! Zappar began as a Kickstarter project.