

Quick Start Guide to the Emergent Reality Lab

Rensselaer's Emergent Reality Laboratory

The **Emergent Reality Lab (ERL)**, affiliated with the Center for Cognition, Communication & Culture, is an Institute core research facility housed at Rensselaer's Technology Park and administered by the School of Humanities, Arts & Social Sciences.

The ERL is a platform for research in virtual reality and mixed reality, combining the real world with immersive virtual environments and the immersion of storytelling and gameplay. The ERL is a CAVE™-like virtual reality system that can be reconfigured for different project needs. The ERL is designed to support new research in education, intervention, culture and the arts, and applied games and simulations. The ERL currently acts as the research home to the **Intelligent, Immersive Environments (IILE)** Core Research Group, comprised of faculty from three HASS departments (Arts, Cognitive Science, Communication and Media).

Access

Use of the ERL is currently limited to members of the IILE Core Research Group and associated undergraduate and graduate students. Requests for keys to the facility must be submitted to the HASS Dean, Mary Simoni. The Director of the Center for Cognition, Communication & Culture is Jonas Braasch.

Current faculty IILE members:

Ben Chang
Marc Destefano
Shawn Lawson
Marjorie McShane
Rebecca Rouse
Silvia Ruzanka
Lee Sheldon
Mei Si
Helen Zhou
Barb Cutler
Jing-Ling Yue

Undergraduate and Graduate students must be faculty sponsored in order to gain access.

Keys and key management are coordinated by Todd Palmer, HASS Facilities Coordinator, Sage 3506, Tel: x6390; email: palmet2@rpi.edu.

Physical Location:

Rensselaer Technology Park
100 Defreest Drive
Troy, NY 12180

The Emergent Reality Laboratory
250 Jordan Road
Troy, New York 12180

518-276-3725

Transportation & Directions.

Currently, access to the ERL is the personal responsibility of researchers and guests. Information on where and when to pick up a Rensselaer Shuttle is forthcoming.

Driving directions:

1. Travel south on 15th Street toward Bouton Road.
2. Turn left onto Congress Street/Route 2.
3. Take slight right onto Route 66/Pawling Avenue.
4. Turn right onto Maple Avenue.
5. Turn right onto Spring Avenue.
6. Stay straight to go onto Campbell Avenue.
7. Turn left onto Vandenburg Avenue/Route 4, continue to follow Route 4 for 1.9 miles.
8. Turn right to enter the Tech Park on Jordon Road.

Should you need to arrange for large groups of students to go to the ERL, please contact Emily Moorefield mooree3@rpi.edu in the Dean's Office at least 2 weeks prior to the event.

Scheduling

All IILE Core Research Group use of ERL facilities is currently self-scheduled via Google calendar. For access to the calendar, please send an email request to Emily Moorefield mooree3@rpi.edu in the Dean's Office. Student use of the ERL facilities must be sponsored by an IILE faculty member.

Equipment

- 3 Da-Lite 3D Virtual Black rear-projection screens, 14' x 7.5'
- 14' floor projection area (in progress)
- 4 passive polarized 3D projector pairs, each 2 Panasonic PT-AR100U 1920x1080 full HD projectors (total resolution of 8 megapixels per eye)
- Vicon tracking system with 4 Bonita infrared cameras
- 8 channel surround sound
- Each wall is driven by a custom-built sound-dampened workstation from Puget Systems equipped with 3.5GHz Quad-core CPU's, 16 GB RAM and a 2GB Nvidia GTX 680 graphics card, all networked together over gigabit ethernet.

Technical Support

Technical support for ERL facilities and equipment is currently provided by the HASS Information Services. Please contact:

Ethan Coppenrath
Manager, Information Services
Office: Sage 2408
P: 518.276.2814
F: 518.276.2235
coppee@rpi.edu

John Grady
A/V Technician
Office: WEST G12
P: 518.276.4775
F: 518.276.4370
gradyj3@rpi.edu

Mark Maiellaro
Applications Support Analyst
Office: SA 2410
P: 518.276.3729
F: 518.276.2235
maielm@rpi.edu

Jay McGlothlin
Systems Administrator, Sr.
Office: SA 2404
P: 518.276.2737
F: 518.276.2235
mcglow2@rpi.edu

Greg Palmer
Media Engineer
Office: SA 2406
P: 518.256.7925
F: 518.276.2235
palmeg2@rpi.edu

General Housekeeping

Day to day housekeeping is currently the responsibility of ERL users. Clean up after yourself in the kitchen and throw garbage in the dumpster located outside the building.