

# Jeffrey Jacobson, Ph.D.

CEO, ConstructionVR  
617-435-0517, [jeff@constructionvr.com](mailto:jeff@constructionvr.com)

My doctorate in Information Science is centered on the psychology of learning and information flow in virtual and mixed reality. I have mastered each wave of these technologies for 25 years, most recently as a consultant and project manager in several fields. My publications are cited over 1,000 times in the scientific literature (see <http://enterprisevr.com/jacobsonPublications2017.htm>) and still referenced in new projects today. Recently, I have helped build up the VR/AR/MXR tech community in Greater Boston, through mentoring, teaching, and organizing, which I love to do.

## **WORK EXPERIENCE**

---

**CEO** (and founder), **ConstructionVR** (aka EnterpriseVR), Boston, MA

2014 – present <http://constructionvr.com>

- Training, advising, and (software) project management, in VR & AR for architects and builders.
- Clients include: Payette, Shepley Bulfinch, DRA Architects, Consigli Construction, Ver-Tex Lighting and Shades, Scalable Display Technology, and Sychro Ltd. Many more collaborators.

**Executive Director** (and founder), **PublicVR**, Boston, MA

2004 – 2014 <http://publicvr.org>

- Public research and open software for educational VR and MXR.
- Raised funds and wrote grants, winning NEH, NSF, NFF, and private funding.
- Mentored 19 students in academic internships, most of whom published their work.

## **COMMUNITY BUILDING (2015 – 2017)**

---

**Organizer, BostonVR** (a 501c3 non-profit) **2014 – present**

<http://bostonvr.org> or <https://www.meetup.com/Boston-Virtual-Reality/>

- With over 4400 members, BostonVR is the 5<sup>th</sup> largest VR meetup group in the world.
- Jeffrey Bail and I lead BostonVR in 2015 and 2016. I am still chairman of the board.
- Monthly meetings with invited speakers and community provided demonstrations.

**Outreach to Architects and Construction Professionals** (As ConstructionVR CEO.)

- Led 12 companies demonstrating VR & AR for three days on the trade floor of [Architecture Builder's Expo](#) November, 2016. In 2017, we'll have 1000 sq ft and an audience of 30,000.
- In-house lunch talks on VR & AR at 15 architecture and construction firms. Spring 2017
- Taught monthly workshops on VR & AR in architecture and construction. Aug 2015 – Oct 2016

**Constant Outreach to the Tech Sector**

Every month, I am on stage at some conference, event, or hackathon. **Examples:**

- Primary speaker at the BostonVR meetup, "The Psychology of Virtual Space". March 2017
- Mentor and speaker at the Reality Virtually Hackathon. Media Lab at MIT, October 2016.
- On a panel *Construction, Architecture, Urban Planning*, at Harvard iLab. September, 2016.

**Workshop on VR & AR for Education**, for [Harvard School of Education](#), Boston, MA, January 2017

- Third organizer for Dr. Chris Dede's workshop for top scholars in educational VR & AR.
- Participated as a scholar, wrote a chapter for the workshop book, *Virtual, Augmented, and Mixed Realities in Education*.
- Every year, I speak on immersive media to one of Dr. Dede's classes in educational technology.

## **TECHNICAL PROJECT MANAGEMENT**

---

As an information scientist, I can communicate with professionals in any field, working closely with them to discover the right questions and build the answers. I have managed dozens of VR and AR projects, working directly with the diverse technical contributors (programmers, artists, etc.) My own knowledge of user experience design and programming helps. **Examples:**

### **VR CAVES and Architectural Virtualizations, ConstructionVR**

2014 – 2017 <http://constructionvr.com>

- Build a two-walled, mobile, corner cave with MiddleVR, ART Flystick, ART tracking. Prototyped architectural walkthroughs in Unity for Architecture Builder's Expo in 2016.
- Configured a three-walled CAVE at Scalable Display using WorldViz software and hardware.
- Produced VR interactive tours for architectural designs, some with advanced lighting effects.
- Used unity3D, HTC Vive, Samsung GearVR, Oculus Rift, and the CAVEs.
- Users could navigate, teleport, move objects, and switch through architectural options.

### **Egyptian Oracle Performance, National Endowment for the Humanities & PublicVR, Boston, MA**

2010 - 2013 [http://publicvr.org/html/pro\\_oracle.html](http://publicvr.org/html/pro_oracle.html)

- A mixed-reality performance with live actors, digital puppets, and audience participation “in” a projected virtual temple. Built with Unity3D.
- Team: Egyptologist, puppeteer, animators, programmers, sound technicians, actors, etc.
- Performed at the Boston Museum of Science, Northeastern University, and other venues.
- Book: <http://www.bloomsbury.com/us/the-egyptian-oracle-project-9781474234153/>

### **Gates of Horus Game and Research, Univ. of Pittsburgh, PA, and PublicVR, MA**

2004 – 2008 [http://publicvr.org/html/pro\\_gates.html](http://publicvr.org/html/pro_gates.html)

- Built a game based on a Virtual Egyptian Temple, which runs on a desktop PC or digital dome.
- Student interacts with an artificially intelligent virtual priest to unlock the mysteries.
- Proved superior learning with VR, reported in [two academic journal articles](#).
- Tools: Unreal Engine and CaveUT (see below). Team: Egyptologist, artist, animator, etc.

### **Virtual Egyptian Temple, Connecticut Science Center, Hartford, CT & PublicVR, Boston, MA**

2014 [http://publicvr.org/html/pro\\_egypt.html](http://publicvr.org/html/pro_egypt.html),

2006 – 2010 CMNH, Pittsburgh, PA, [http://publicvr.org/html/ins\\_earththeater.html](http://publicvr.org/html/ins_earththeater.html)

- In both museums' immersive theaters, installed the temple, which a presenter navigates.
- This thematically extends their physical Egypt collection into the virtual space of the dome.
- Team: Egyptologist, programmer, artist, student artists, educator, museum staff.
- Tools: Unreal Engine, Unity3D, CaveUT, 3ds Maxx, Photoshop, SVN, Dolby Server.
- Audience response was enthusiastic. Both museums can now develop these virtual tours.

## **EDUCATION**

---

Ph.D. Information Science (2008) – University of Pittsburgh, Pittsburgh, PA

BA in Computer Science (1986) – University of Texas at Austin, Austin, TX

**I also have a US government security clearance.**