# IMMERSIVE EDUCATION INITIATIVE IMMERSIVE COLORADO

## VIRTUAL REALITY BRAIN INTERFACES A.I. 3D PRINTING NEUROGAMES CYBERNETICS August 23-26 : Denver & La Junta Colorado ImmersiveEducation.org #i2016

# **Call for Participation (CfP)**

The **Immersive Education Initiative** has issued this Call for Participation for **General Audience** session submissions and **Academic and Technical** session submissions as detailed below.

This CfP is available online at <u>http://ImmersiveEducation.org/i2016</u>

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### **1. IMMERSIVE COLORADO Overview**

**IMMERSIVE COLORADO** will address the personal, cultural and educational impact of immersive technologies such as Virtual Reality (VR), Augmented Reality (AR), brain interfaces, cybernetics, 3D printing, personal robotics, telepresence, virtual worlds, simulations, game-based learning and training systems, immersive teaching and immersive learning systems, and fully immersive environments such as caves, domes and planetariums.

IMMERSIVE COLORADO runs from the evening of August 23 through August 26 in collaboration with the **United States Department of the Interior (DOI)** in celebration of the 100th anniversary of the **USA National Park Service (NPS)**.

The conference features a unique format that spans two locations in Colorado: **Denver** and **La Junta**.



The event, which is open to the public, includes a series of hands-on **Virtual Reality (VR) workshops** during which attendees will create their very own VR experiences while touring **stunning Colorado landmarks** such as <u>Garden of the Gods</u>, <u>Pikes Peak mountain</u> and historic <u>Bent's Old Fort</u> as they travel together from Denver to La Junta.

Transportation from Denver to La Junta on August 25<sup>th</sup>, the return trip on August 27th, and the Virtual Reality workshops that are conducted at Colorado landmarks along the way are included with the conference registration fee for which all speakers and presenters receive a discount (see "6. How to Submit and Important Dates" below for details).

A personal Immersive Education Google Cardboard **VR headset** is also provided to all speakers, presenters and attendees.



#### Immersive Bent's Old Fort Virtual Ribbon Cutting Ceremony

During the conference speakers, presenters and attendees are invited to "cut the virtual ribbon" on <u>Immersive Bent's Fort</u>, officially opening the Minecraft rendition of the historic fort to teachers, students and the general public. Participants will receive hands-on Minecraft training in advance of the ribbon cutting ceremony.

Known as the "Castle of the Plains," <u>Bent's Old Fort</u> was a 1830s - 1840s adobe fur trading post on the mountain branch of the <u>Santa Fe Trail</u> where traders, trappers, travelers, and the Cheyenne and Arapaho tribes came together in peaceful terms for trade. A unique center of cultural exchange at the time, no less than seven different languages were spoken at the fort including English, Spanish, French, and numerous American Indian languages. Today, living historians recreate the sights, sounds, and atmosphere of the past with guided tours, demonstrations and special events.

On November 19, 2014, the Immersive Education Initiative announced that Bent's Old Fort would be **reconstructed virtually** in the video game Minecraft and also as a fully immersive 3D virtual reality (VR) environment.

One of several new activities under the Initiative's Immersive Arts and Culture program, Immersive Bent's Old Fort is being developed in collaboration with the United States Department of the Interior National Park Service, the City of La Junta Colorado, Otero Junior College, and Colorado's East Otero School District.

Immersive Bent's Old Fort, along with corresponding history curricula and teaching materials, will be **available free of charge** to the general public and to schools around the world.

Online virtual tours of the immersive fort will be available to schools as a complement to the in-person tours currently conducted on-site at the fort by National Park Service rangers. For details visit <u>http://ImmersiveEducation.org/fort</u>

#### **Modular Conference Format**

Immersive Education Summits (iED Summits) such as IMMERSIVE COLORADO are official Immersive Education Initiative conferences organized for educators, researchers, administrators, business leaders and the general public. iED Summits consist of presentations, panel discussions, break-out sessions, demos, hands-on workshops and hands-on professional development programs that provide attendees with an in-depth understanding of immersion, the technologies that enable immersion, and immersive teaching and learning techniques and best practices.

iED Summits feature new and emerging virtual worlds, virtual reality, game-based learning and training systems, simulations, mixed/augmented reality, fully immersive environments, immersive learning and training systems, cutting-edge research from around the world, and related tools, techniques, technologies, standards and best practices.

Building on the success of the previous 10 years of iED Summits, IMMERSIVE COLORADO will feature a **unique modular format** that premiered at <u>IMMERSION 2014</u> in Los Angeles, California, and <u>IMMERSION 2015</u> at Université Paris-Sorbonne ("the Sorbonne") in Paris, France.

Speakers at previous iED Summits have included **United Nations**, NASA, **Harvard University**, MIT Media Lab, **Massachusetts Institute of Technology (MIT)**, **Smithsonian Institution**, Walt Disney Animation Studios, **Google**, Microsoft, **Intel**, United States Department of the Interior (DOI) National Park Service, **United States Department of Education**, UCLA, **Stanford University**, USC, and other world-class organizations and academic institutions.

Submitters are encouraged to review the previous 10 years of iED Summits at:

http://summit.ImmersiveEducation.org

#### 2. Hosts and Dates







**IMMERSIVE COLORADO** runs from the evening of August 23 through August 26 in collaboration with the **United States Department of the Interior (DOI)** in celebration of the 100th anniversary of the **USA National Park Service (NPS)**.

The conference features a unique format that spans two locations in Colorado: Denver and La Junta.

The <u>Denver Museum of Nature and Science</u> will host the Denver conference sessions on August 23<sup>rd</sup> and 24<sup>th</sup>. The conference begins with an opening reception and series of welcoming talks in the museum's planetarium on the evening of August 23<sup>rd</sup>, with conference sessions occurring at the museum the following day.

On August 25<sup>th</sup> the **USA National Park Service** will host a special conference social event in the evening at historic <u>Bent's Old Fort</u> in La Junta, while <u>Otero Jr. College</u> will host conference sessions in La Junta during the day on August 25<sup>th</sup> and August 26<sup>th</sup>.

Transportation from Denver to La Junta on August 25<sup>th</sup>, the return trip on August 27th, and the Virtual Reality workshops that are conducted at Colorado landmarks along the way are included with the conference registration fee for which all speakers and presenters receive a discount (see "6. How to Submit and Important Dates" below for details).

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During the conference speakers, presenters and attendees are invited to "cut the virtual ribbon" on <u>Immersive Bent's Fort</u>, officially opening the Minecraft rendition of the historic fort to teachers, students and the general public. Participants will receive hands-on Minecraft training in advance of the ribbon cutting ceremony.

#### **3. General Audience Sessions**

General Audience sessions are intended to appeal to all conference attendees, ranging from the newbie (those who are entirely new to immersive technologies and techniques) to the experienced. In contrast, Academic and Technical sessions appeal specifically to experienced attendees as described in "Academic and Technical Sessions" below.

General Audience session submission categories include papers, posters, panel discussions, presentations, workshops, exhibits, demonstrations, and outliers (latebreaking sessions that cover an especially novel or unique aspect of immersion).

Select General Audience sessions from Colorado will be invited to present at IMMERSION 2016 this November.

General Audience sessions can be considered **high-level overviews** of a given topic or subject matter, and may address any number of Immersive Education topics (see "iED Topics" below) in the context of one or more of the following:

- 1. **Utilizing Immersive Technologies and Techniques.** Teachers, trainers, health/ safety experts, researchers, developers, students and end users are encouraged to share their experience with using immersive technology and techniques both in and out of the classroom or corporate training room.
- 2. **Pedagogy and Assessment**. Pedagogy and Assessment General Audience sessions enable teachers, trainers and researchers to present a high-level overview of their work in the field of teaching and/or assessing learners using immersive technologies and techniques.
- 3. New and Emerging Immersive Technologies and Techniques. Teachers, trainers, health/safety experts, researchers, developers, students and end users are invited to present high-level overviews of new and emerging immersive technologies and immersive teaching/training techniques.
- 4. **Immersive Arts & Culture.** These General Audience sessions address any aspect of art or culture that involves immersive technologies or immersive techniques, including, but not limited to:
  - a. Creating Immersive Experiences (technologies, techniques, and processes)
  - b. Deploying and Supporting Immersive Experiences
  - c. Immersive Film and Movie Experiences (such as Virtual Reality movies)
  - d. Using Immersive Technology and/or Techniques to teach Art and/or Culture
  - e. 3D Printing as a means to preserve Art and Culture
  - f. Virtual Reality and/or Video Games as an Art Form
  - g. Caves, Domes and/or Planetariums as an Art Form
  - h. Other (related Immersive Arts & Culture topics)

### 4. Academic and Technical Sessions

Academic and Technical sessions are intended to appeal to conference attendees who have prior experience applying, designing, and/or developing immersive technologies and/or techniques. In contrast, General Audience sessions appeal specifically to less experienced attendees as described in the "General Audience Sessions" section above.

Academic and Technical session submission categories include papers, posters, panel discussions, presentations, workshops, exhibits, demonstrations, and outliers (late-breaking sessions that cover an especially novel or unique aspect of immersion).

Select Academic and Technical sessions from Colorado will be invited to present at IMMERSION 2016 this November.

Academic and Technical sessions can be considered **low-level** sessions that address a given topic or subject matter in a technical, theoretical or critical manner. These sessions may address any number of Immersive Education topics (see "iED Topics" below) in the context of one or more of the following:

- 1. The design, development, deployment and/or support of immersive experiences
- 2. The design and/or development of immersive technologies and/or techniques
- 3. The study and/or assessment of immersive technologies, experiences and/or techniques
- 4. The design and/or implementation of research studies in the field of immersion
- 5. The design and/or development of immersive experiments

### 5. Immersive Education Topics (iED Topics)

Proposed sessions may address one or more of the following Immersive Education (iED) topics. Please note that proposed sessions may address topics not listed below provided the focus of the proposed session is on immersive technologies and/or immersive techniques:

- Virtual Reality, Augmented Reality, Mixed Reality, Holograms and Holography
- Brain interfaces, cybernetics, affective computing (systems that can recognize, interpret, process, and simulate human feelings and emotions), neuro-gaming technologies that are used to create adaptive and radically compelling game experiences, and neuro-technology
- Robotics, 3D printing (the "inversion of immersion"), and drones for teaching and training
- Simulations and simulators
- Game-based learning and training systems, serious games, and learning games
- Fully immersive environments such as caves, domes, planetariums and spheres
- Input devices and systems (headsets, haptics, gloves, suits and more)
- Natural interfaces, invisible interfaces, and touch interfaces
- Capture devices and systems (cameras, scanners, motion capture, facial recognition, etc.)
- Virtual Reality headsets (e.g., Google Cardboard, Samsung Gear VR, Oculus Rift, Microsoft HoloLens, Playstation VR, etc.)
- Virtual, augmented and/or mixed reality for cultural heritage education
- Creative computing, 21st century skills and computational thinking & learning systems
- Artificial Intelligence (A.I.) and Cognitive Computing in the <u>Age of Immersion</u>
- Blockchain, Bitcoin and cryptocurrency for teaching, training and/or learning
- Immersive Education Clubs and Camps (reports, updates and workshops)
- Learning models, styles, techniques and philosophies (e.g., blended learning, stealth learning, hybrid learning, personalized learning, social and collaborative learning, student-driven learning, location-based learning, contextual learning and more).
- Commercial video games as teaching and training tools (e.g., World of Warcraft, Little Big Planet, Minecraft, Portal, Assassin's Creed, Skyrim, BioShock, Scribblenauts, Civilization, SimCity, etc.)
- Virtual laboratories, tools and testbeds
- Health and safety applications, training and techniques using immersive technologies
- Smart and/or responsive learning, educational and training environments
- Immersive Education Certification (iED CERT) and Professional Development (PD) programs
- Psychologically beneficial immersive environments as defined by <u>iED PIE.TWG</u>
- Pedagogy and assessment in the <u>Age of Immersion</u>
- Future research directions and issues in the <u>Age of Immersion</u>

#### 6. How to Submit and Important Dates

For details on how to respond to this Call for Participation (CfP) visit <u>http://</u> <u>ImmersiveEducation.org/signup/colorado</u> and enter your name and email address.

Within **48 hours** you will receive details on how to respond to the CfP via email from <u>iED@ImmersiveEducation.org</u>

Note that in some cases email from iED **may not arrive in your email inbox**. If you do not receive instructions within 48 hours follow the instructions in the "**Not getting iED Emails?**" section below.

Please note that submitters are encouraged to submit a short abstract by May 31<sup>st</sup>, although this is an **optional** deadline (submitters may skip the May 31<sup>st</sup> abstract deadline if desired).

Please also note that all accepted submissions require at least one of the submission authors to register and attend the conference to present in person, for which a discount registration code will be provided.

#### **IMPORTANT DATES TO REMEMBER**

May 31 Abstract Deadline (optional) June 15 Draft Manuscript Deadline July 15 Revised Manuscript Deadline August 15 Final Manuscript Deadline August 20 Presentation (Slides) Deadline

### 7. Not getting iED Emails?

If you are not receiving iED email please take the following steps to ensure that you can receive future updates:

- 1. Add <u>iED@ImmersiveEducation.org</u> to your email contacts and then send an email message to <u>iED@ImmersiveEducation.org</u>. This will indicate to most email systems that you are expecting email from the iED email address (so that these emails won't be placed into a spam or junk folder).
  - TIP: Be sure to place <u>iED@ImmersiveEducation.org</u> in your address book, trusted sender list or approved sender list to increase the probability that iED email will arrive in your inbox.
- 2. Look in your spam or junk email. If you find iED messages there be sure to flag them as "legitimate" by starring or otherwise moving them back into your inbox.
- 3. Sign up again with an alternate email address. Simply visit <u>http://</u> <u>ImmersiveEducation.org/signup/colorado</u> and sign up using a different email address than the one you used initially.
- 4. Ask a technology administrator at your organization to ensure that future messages are delivered into your email inbox.

On average **you should receive 1 to 2 updates** from <u>iED@ImmersiveEducation.org</u> each month. If taking the above steps does not resolve your inability to receive these messages you can sign up with a different email account or ask a technology administrator at your organization to ensure that future messages are delivered into your email inbox.

## 8. Facebook and Twitter

Keep up to date on all Immersive Education activities by liking or following the official iED Facebook and Twitter accounts:

http://facebook.com/ImmersiveEducation

http://twitter.com/Immersive

9. Contact



http://ImmersiveEducation.org

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