DESIGN TOOLS OF THE FUTURE:

Immersive & Interactive

A hackathon associated with ACADIA 2017

October 28 - 29, MIT

**1.Theme**

* How does a VR tool work in the future to help an architect presenting a design of a new public school to the local community?
* What is an AR tool that real estate brokers can use to help promote their properties to home hunters?
* What is a future MR tool on the construction site that helps building faster, safer and more economically?

Focusing on challenges such as these in the real design world context, including but not limited to architectural, landscape and product design as well as urbanism, real estate and construction, this hackathon will foster an interdisciplinary environment for proposing strong innovative solutions to the future.

In the two and half day event, participants will work in groups to develop conceptual designs and working prototypes. Each group will identify a particular problem related to a design field and determine an immersive or interactive technology to explore. Through a series of tutorials provided by industry partners, participants will learn tools and procedures to develop solutions with the technology they prefer.

At the end of the workshop, a select group of experts and sponsors will judge the final prototypes / presentations and award top projects.

Examples of Investigated Technologies (The list of technology partners is to be confirmed.)

* Microsoft Hololens
* Oculus Rift
* Google Tango
* Unity 3D
* Autodesk Stingray
* HTC Vive
* Samsung Gear
* Apple AR Kit
* Qualcom Vuforia
* Forum8 VR Design Studio

Using some of these tools, we invite designers, engineers and creative thinkers to redefine the scope of digital and physical computing at the **Design Tools of the Future**hackathon. What are the tools of the future designers? How can we creatively adopt the cutting edge technologies to reinvent the design process and reach beyond the established boundaries?

**2. Schedule**

**Day 0 (October 27, evening only)**

Sponsor presentations and tutorials.

Forming Teams and Kick-Off

**Day 1 (October 28)**

Hackathon (all day) mixed with additional sponsor presentations and tutorials

Mid-Day Ideas Presentation

**Day 2 (October 29)**

Hackathon continued (half day)

Final Presentation

Jury and Award Ceremony

**3. Prizes**

Design Tools of the Future Awards

Sponsor Titled Prizes (A prize per each of the Tier 1 and Tier 2 Sponsors)

**4. Sponsorship**

We seek sponsorships in various capacity and form in order to provide services and awards to the participants. All sponsors and technology partners will be acknowledged through print and online media related to the event.

1. **Technology Partner:** We ask our technology partners to provide hardware/software and tutorials to participants during the event. Our technology partners will be represented on billboards, print and online media, and will have their own kiosks to represent their companies.
2. **Tier 1 Sponsor (>$4000) :** In addition to Tier 2 sponsor benefit, Tier 1 Sponsor will be acknowledged with the most visibility during the event. Tier 1 Sponsor’s name will be listed first in the sponsor list for printed and online media, and we provide additional billboards for them to represent their company at the event site.
3. **Tier 2 Sponsor (>$2000):** In addition to Tier 3 sponsor benefit, Tier 2 sponsor will have a chance to make a prize titled with the name of the company, select a winning project, and present a gift of their choice.
4. **Tier 3 Sponsor (>$500) :** Tier 3 sponsor will be represented on billboards and online media.

**5. Preparation Schedule**

## August

Planning for space and fundraising.

## September

**Website and Branding:** A website for the hackathon is to be created. Information about the theme, mentors and sponsors will be published.

**Venue:** The hackathon venue will be determined and reserved for October 27 - 29.

**Mentor Advertisement and Selection:** An advertisement for hackathon mentors will be circulated among relevant lists as well as published on hackathon website. We aim to gather a group of people with diverse design and technical skills, especially from the departments of Architecture, Media Lab and EECS.

**Staff:** In addition to mentors, a group of students will be assigned for helping participants during the event.

**Participant Advertisement and Online Signup:** Information about the hackathon will be circulated among relevant mail lists, through ACADIA and hackathon website. A link for a signup sheet will be attached. Signup sheet consists of participant information regarding their interests and skills. Additional advertisement will be made through posters around the campus.

**Jury:** The jury will be determined by late September and advertised on website.

## October

**Tutorials**: Sponsor tutorials will take place in designated classrooms. Upon confirmation from sponsors the time and location of tutorials will be determined and necessary reservations will be made.

**Hardware and Software:** All computers and hardware will be prepared a week prior to the hackathon. Necessary software (Unity, Unreal, Android Studio etc.), drivers (Oculus, Vive, HoloLens etc.) and additional utilities will be installed and tested. In addition, each of the VR / AR hardware will be tested.

**Print Materials, Boards and Signages:** All print materials will be prepared a week prior to the hackathon.

**Preparation of Infrastructure:** Desks, power outlets and relevant utilities will be arranged. All signages will be placed the day before the hackathon.

**Prizes**: All prizes will be prepared a week before the hackathon.

## Organization Committee

**Acadia 2017 Sub-committee for Hackathon**

Prof. Federico Casalegno (MIT, Comparative Media Studies)

Greg Demchak (Synchro Software)

Prof. Takehiko Nagakura (MIT, Architecture)

Cagri Hakan Zaman, PhD Candidate (MIT, Architecture)

**Contact**

Cagri Hakan Zaman

zaman@mit.edu