

MARCH 18 - 22

2017

IEEE VR

LOS ANGELES



IEEE

- IEEE (The Institute of Electrical and Electronics Engineers) is a professional organization involved with the advancement of technology in various areas.

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- And I joined it because it gave me a \$80 discount to the conference.

Topics

- Tracking and sensing
- Input devices for VR/AR/MR
- Advanced display technology
- Immersive projection technology
- Haptics, audio, and other non-visual interfaces
- Modeling and simulation
- Computer graphics techniques for VR/AR/MR
- Virtual humans and avatars
- Multi-user and distributed VR/AR/MR
- VR systems and toolkits
- 3D interaction for VR/AR/MR
- 3D selection and 3D manipulation
- Locomotion and navigation in virtual environments
- User studies and evaluation
- Perception, presence, virtual embodiment, and cognition
- Teleoperation and telepresence
- Applications of VR/AR/MR
- Ethical issues in VR/AR/MR
- Interactive storytelling in 360° videos

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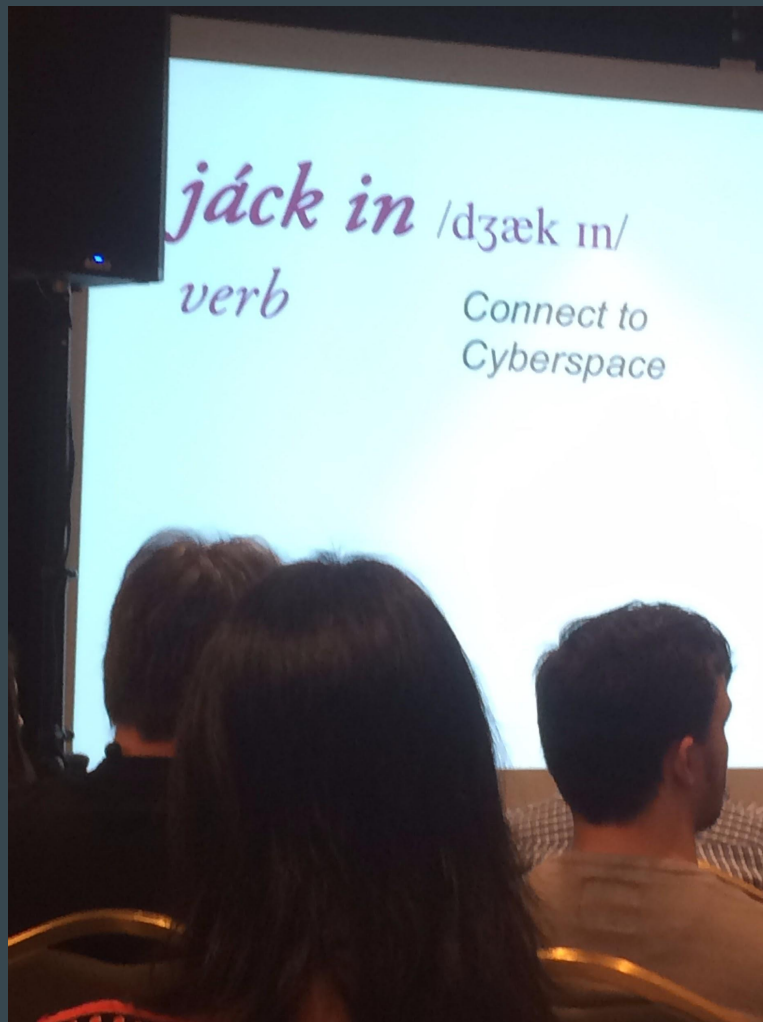
Input devices for VR/AR/MR

- 3DUI
- Internet of Abilities: Human Augmentation, and Beyond (Keynote)
- We should create tech not to replace humans, but to enhance us and our quality of life
- Windows
- Smile

jáck in /dʒæk in/

verb

Connect to
Cyberspace



JackIn

JackIn は、人間を、人間と異なる能力を持つ人工物や、他の人間と接続することで、総合的に人間の能力や存在を拡張するための枠組みです。また、体外離脱感覚を提供することを JackOut と呼んでいます。機械と人間との接続による Human-Machine JackIn、人間と人間とを接続する Human-Human JackIn、JackIn と JackOut により連続的に1人称視点と3人称視点を行き来できるJackIn Spaceの研究を進めています。

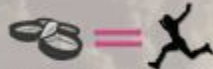
JackIn is the vision for augmenting human capability and human existence. It enables immersive connections between humans and other artificial entities, or between humans and other humans. JackOut enables the out-of-body experience. We are investigating Human-Machine JackIn, Human-Human JackIn, and an environment that enables seamless migration between 1st and 3rd person perspectives (JackIn Space).

*JackInはデザイン研究所のコンピュータサイエンス専攻の学生が、電話応答への参入を意味して「jack in」の音から「jack in」を造語した。The term "jack in" was originally used in SF since "Neuromancer" by William Gibson, referring to total immersion in the cyberspace.



JackIn original idea sketches [2011-2013 Rekimoto]

[*jack in* /dʒæk ɪn/ 没入・憑依する]
[*jack out* /dʒæk aʊt/ 離脱する]



Human-Machine JackIn



JackOut (out-of-body)



Human-Human JackIn



JackIn Space

JackInの諸形態



Jack in!!
MegaMan, Execute!

- [Windows Link](#)

Perception, presence, virtual embodiment, and cognition

- Paint with Me: Stimulating Creativity and Empathy While Painting with a Painter in Virtual Reality
- [Link](#)



VR 2017: MagicToon - A 2D-to-3D Creative Cartoon Modeling System with Mobile AR

[Video](#)

Interactive storytelling in 360° videos

- Importance of streaming
- How to tell stories in VR vs Traditional Movies
- Bank Robbery Example

Conference Proceedings

- My hope is that future students will get use out of the HTC Vive, so here's the conference proceedings if you are interested for junior/senior IS (or are just curious).
- ieeevr.org/2017/proceedings
- Username: vr2017
- Password: WelcomeToLA

Thanks!