

AI in VR

ANSI Joint Member Forum 10/19/17

Michael Ludden
Director of Product
IBM Watson Developer Labs & AR/VR Labs
[Twitter.com/Michael_Ludden](https://twitter.com/Michael_Ludden)
[LinkedIn.com/in/mludden](https://www.linkedin.com/in/mludden)
mludden@us.ibm.com

Agenda:

AI in VR Example: Star Trek: Bridge Crew with Watson

AI Terminology

Different Approaches to “AI”

AI in VR - 2017 Trends

Future Trends

VR/AR/XR Standards Development

Q&A

PC GAMING

IBM Watson enables voice commands in Ubisoft's Star Trek: Bridge Crew virtual reality game

DEAN TAKAHASHI @DEANTAK MAY 11, 2017 3:00 AM



VR Speech Sandbox: Enabling a speech interface within ...



bit.ly/IBMVRSpeechSandbox

MORE VIDEOS ^



1:20 / 1:30



HD

YouTube



VR Speech Sandbox

Download for Free on **Viveport**





Science

'It's able to create knowledge itself': Google unveils AI that learns on its own

In a major breakthrough for artificial intelligence, AlphaGo Zero took just three days to master the ancient Chinese board game of Go ... with no human help



AI Terminology:
Machine Learning
Algorithm
Narrow AI
General AI
Incentivized Learning
Cognitive
MLaaS
“The Singularity”
Etc.



Science

'It's able to create knowledge itself': Google unveils AI that learns on its own

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Current Approaches To AI

Cloud-based: Us, Microsoft etc.

Local Algorithm: TensorFlow

Open Source: H2O.AI, Algorithm.ia etc.

*GPU Accelerated Training: CUDA

Benefits of each

Cloud-based:

- Easy to implement for quick prototyping
- Low ongoing maintenance cost
- Advanced functionality

Local Algorithm:

- Ownership
- Custom fit
- Offline capable

Open Source:

- Best of both worlds

Drawbacks of each

Cloud-based:

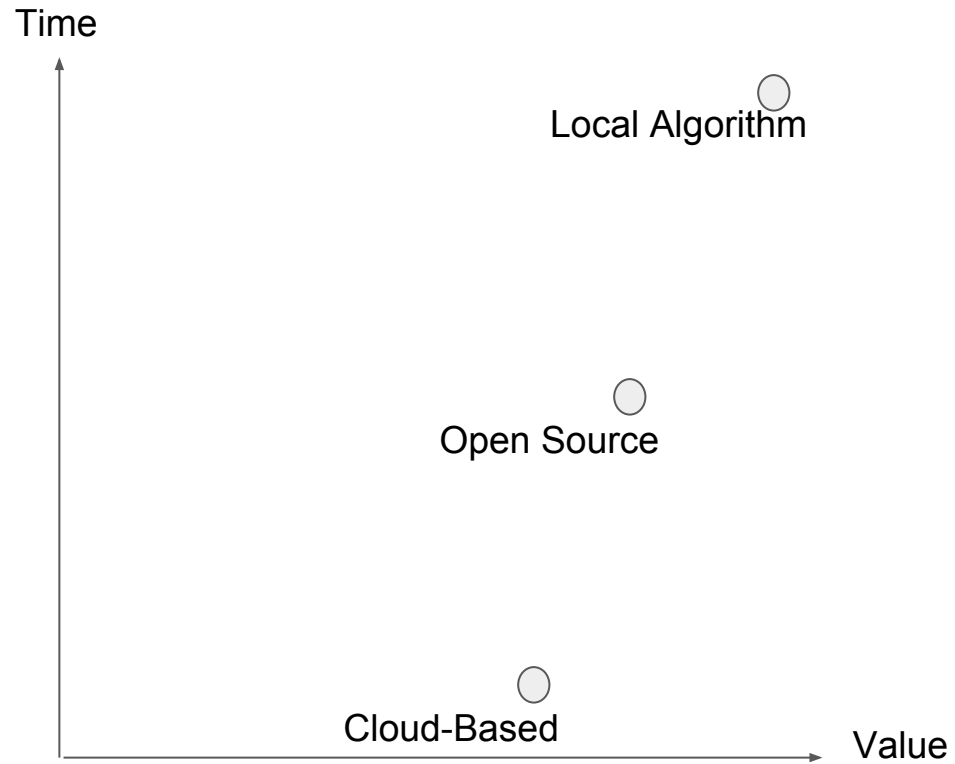
- Beholden to another company for functionality
- Internet connection required for functionality
- Service features may not be taylor fit for needs

Local Algorithm:

- Lengthy time/personnel commitment
- Long term maintenance cost can quickly get out of control
- Much more basic functionality

Open Source:

- Worst of both worlds



AI in VR - 2017 Trends

Interactive Speech Interfaces

Visual Recognition

Data Analysis/Manipulation

Spatial Programming

NPC Replacements

Visual Recognition in VR

vimeo.com/180515627

AI in VR - 2017 Trends

Interactive Speech Interfaces

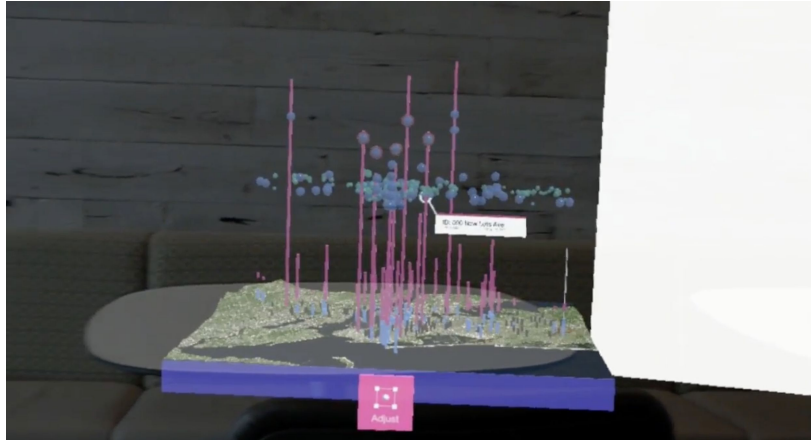
Visual Recognition

Data Analysis/Manipulation

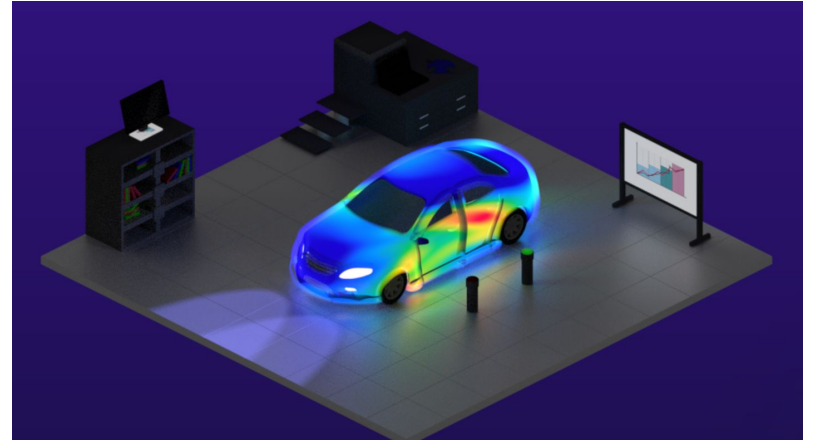
Spatial Programming

NPC Replacements

Data Analysis & Manipulation in VR

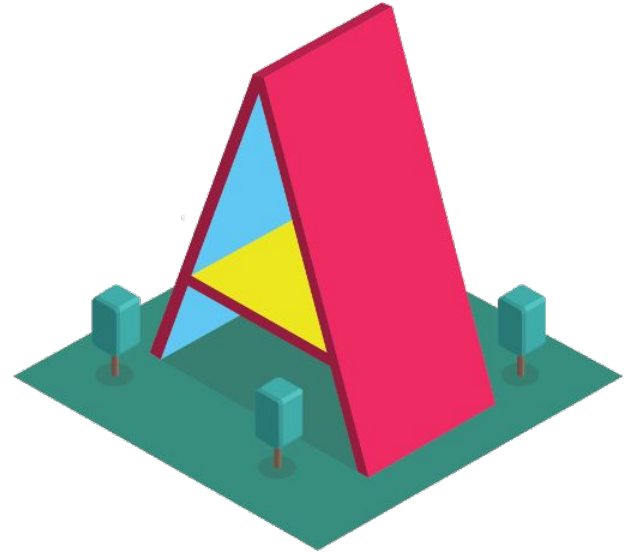
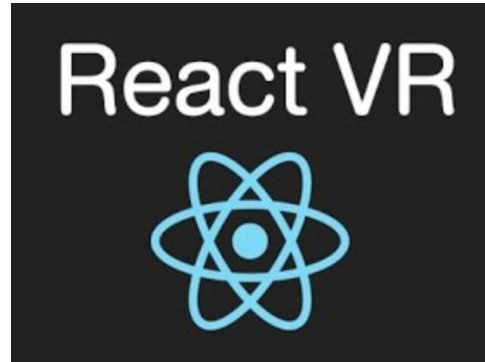


IBM's Immersive Insights



CognitiveVR

Current VR/AR/XR Standards of Note



A-Frame

VR - Future Trends

(AKA: AI in VR will enable)

Moving Beyond “VR Skeumorphism”

Standardizing input methods

“Metaverse Native” Progeny

VR & AR Merging

The Future Of Computing

AI in VR for... Productivity, Therapy, Education, Recovery & Training



Thx!

(Q&A?)

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