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SAND2019-14038C

Welcome to Sandia's First Annual Augmented and Virtual Reality Community of Practice Open Meeting



Tuesday, December 4th, 2018

PRESENTED BY

Sandia's AR/VR Community of Practice Organizing Committee:

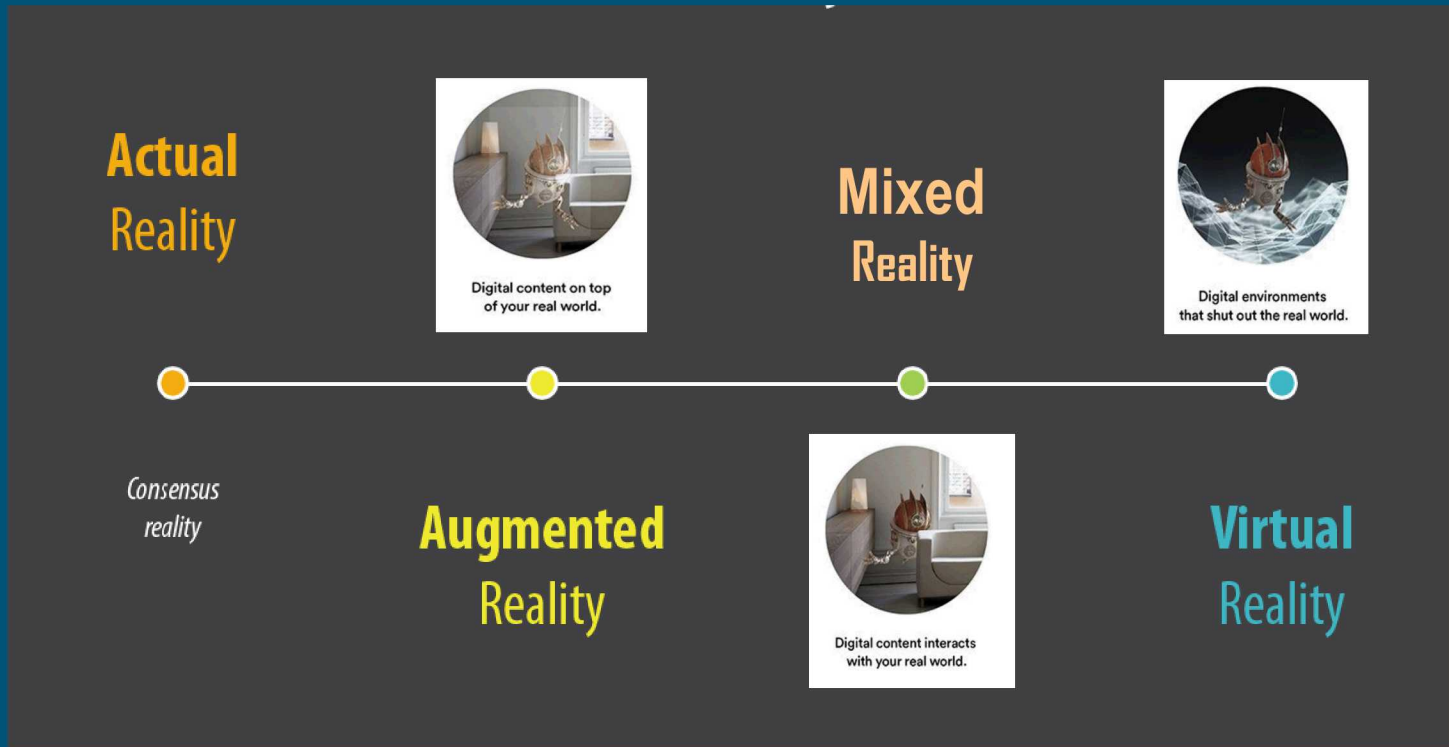
Nadine Miner, April Suknot, Austin Silva, Nick Blazier, Tod Amon, Jon Whetzel, Brad Carvey, Simin Chen

Information Contact: arvr@sandia.gov

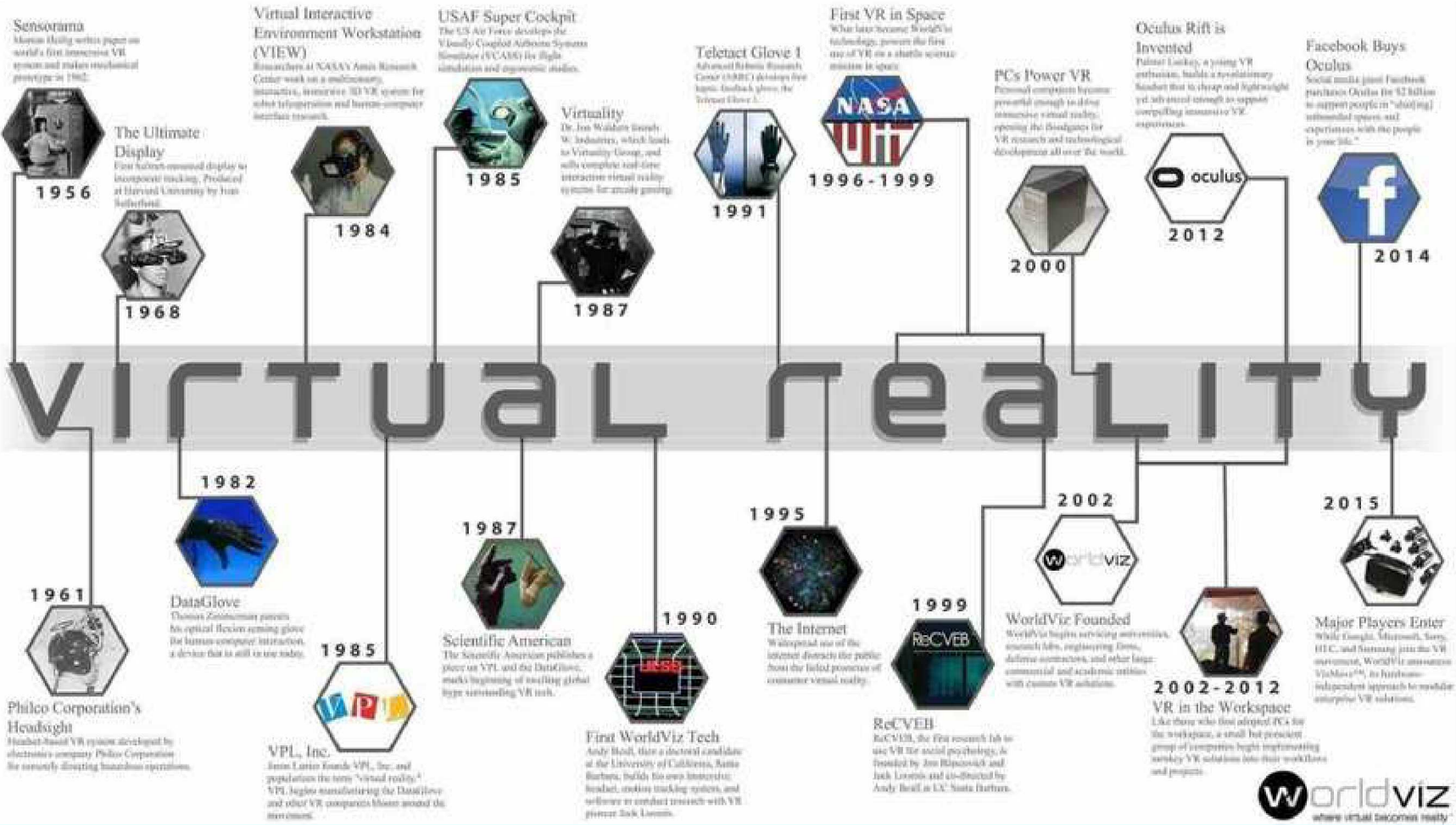
2 | The Time for AR and VR has Arrived



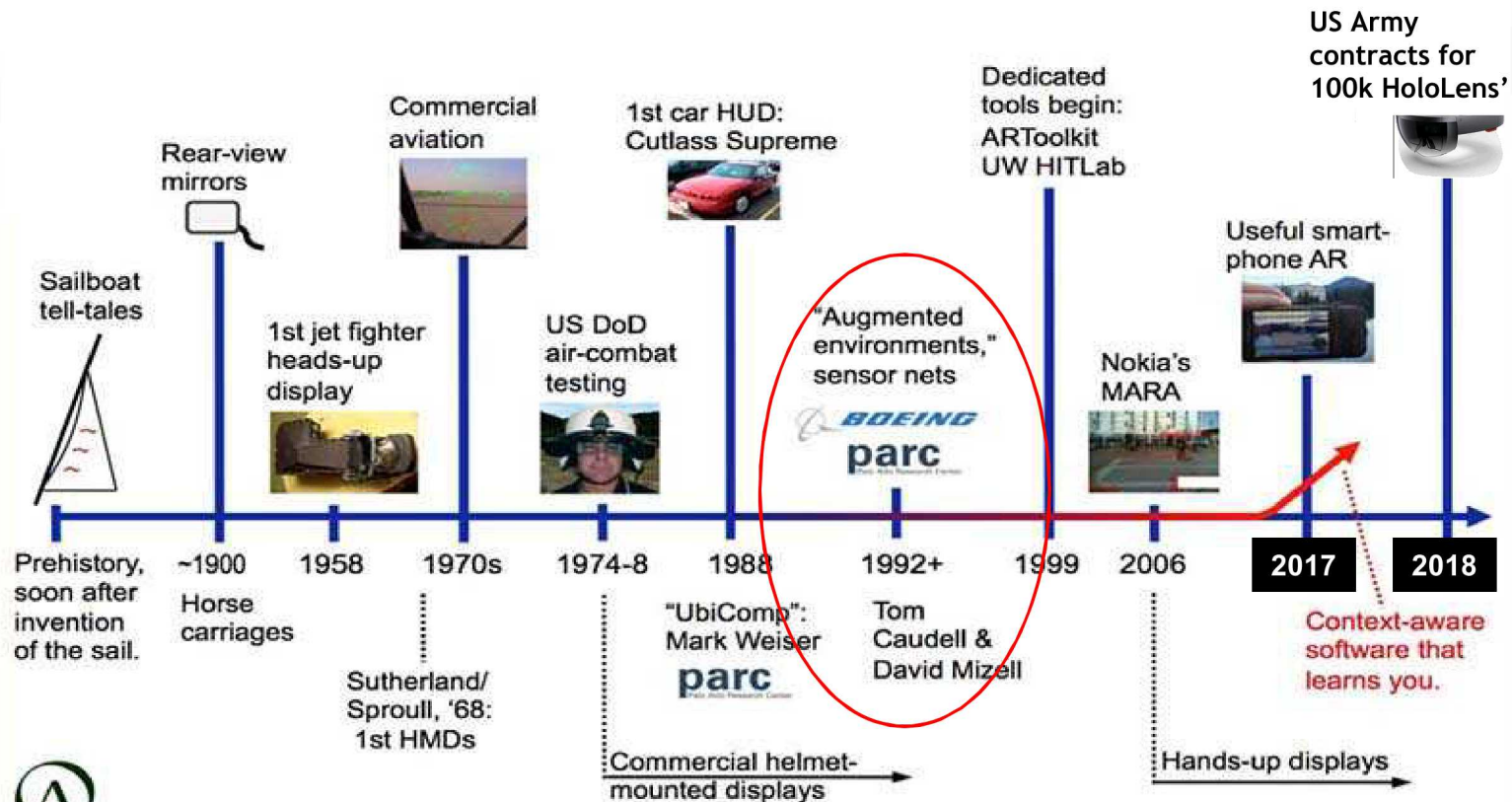
Augmented to Virtual Reality Spectrum



Virtual Reality has come a long way. From the world's top R&D facilities to the nostalgic days of plastic-cased digital entertainment in the 1980s, virtual reality has been through quite a bit to get to where it is now. It took some refining, now VR is poised to revolutionize the way we do just about everything, including the way we work...



Augmented Reality Timeline



Agenda

AM Session | Briefs and Demos

- 8:00 Welcome
- 8:15 Keynote – Dr. Tom Caudell
- 9:00 SNL AR/VR Briefings Part 1
- 10:00 Demos/Break
- 10:45 SNL AR/VR Briefings Part 2

12-1pm Lunch | Idea Lab Tours

PM Session | Deep Dive Discussions

- 1:00 Getting Started in AR/VR, Facilitated by Tod Amon
- 1:30 AR/VR Security Issues, Facilitated by April Suknot
- 2:00 Break
- 2:10 Panel Discussion and Q&A, Facilitated by Austin Silva
- 3:00 Research Ideas/Open Discussion/Breakout Groups, Facilitated by Nadine Miner

7 Morning Session Briefings Part I

9:00 AM – 9:15 AM | Brad Carvey | The Idea Lab

9:15 AM - 9:30 AM | Nick Blazier | Augmented Reality Orbital Display

9:30 AM – 9:45 AM | Mancel Parks | SCRIBE VR

9:45 AM - 10:00 AM | Austin Silva | Using the Collaborative Augmented Reality & Virtual Reality (CARVR) Platform to View Sounding Rocket Post-Flight Data (OUO)



- Process Safety Trainer (OUO/ECI) | Mark Wesley Harris and April Suknot
- Augmented Reality Orbital Display | Nick Blazier
- Interactive Training Framework (OUO) | Nadine Miner
- High-fidelity CAD Model Immersion for Design (OUO) | Jim Daniels
- Demonstration of Micro-Computed Tomography and XRD Texture Datasets Using Virtual Reality Tools (UUR) | Mark Rodriguez
- SCRIBE VR | Ryan Knudsen and Mancel Parks
- Google Glass Demo (OUO) | Aaron Comen and Tod Amon
- Sounding Rocket Demo (OUO/ECI) | Phillip Wang

Morning Session Briefings Part 2

10:45 AM - 11:00 AM | Mark Rodriguez | Visualization of Micro-Computed Tomography and XRD Texture Datasets Using Virtual Reality Tools

11:00 AM - 11:15 AM | April Suknot | Immersive Training for Critical Thinking

11:15 AM - 11:30 AM | Nadine Miner | On the Development of a General-purpose Augmented Reality Training Framework

11:30 AM - 11:45 AM | Mancel Parks | Augmented Reality Sensor Placement Application & Virtual Reality Two-Person Rule Training Application

11:45 AM - 12:00 PM | Laura Matzen | Evaluating Human Performance in AR/VR

Agenda – Afternoon Deep Dive Sessions

- 1:00 Getting Started in AR/VR, Facilitated by Tod Amon
- 1:30 AR/VR Security Issues, Facilitated by April Suknot
- 2:00 Break
- 2:10 Panel Discussion and Q&A, Facilitated by Austin Silva
- 3:00 Research Ideas/Open Discussion/Breakout Facilitated by Nadine Miner



Thank you for attending
Sandia's 1st Annual AR/VR
COP Meeting

Send feedback/comments/questions
to: arvr.sandia.gov