OSA Incubator on Solving the Bandwidth Challenge of Large 3D Displays

15-17 January 2020
Washington, DC USA

HOSTED BY:
Daniel Smalley, Brigham Young University, United States
V. Michael Bove, Jr., vmbove.com, United States
Thomas Burnett, FoVI3D, United States

Wednesday, 15 January 2020

Afternoon   Arrival/Hotel Check-in
                 Hotel Palomar, 2121 P St NW

18:00   Welcome Dinner
                 Bistrot Du Coin, 1738 Connecticut Ave NW

Thursday, 16 January 2020

8:00   Breakfast

8:30   **Welcome**
                 Elizabeth Rogan, CEO, The Optical Society

8:45   **Program Overview and Goals**
                 Design Process: Empathize, Define, Ideate, Storyboard, Test
                         Daniel Smalley, Brigham Young University, United States
                 Software Goal
                         Thomas Burnett, FoVI3D, United States
                 Hardware Goal
                         V. Michael Bove, Jr., vmbove.com, United States

9:00   **Design Process – Empathize**
                 Holography
                         Pierre-Alexandre Blanche, University of Arizona, United States
                 Light-Field
                         Kari Pulli, Raxium Inc., United States
                 Volumetric
                         Curtis Broadbent, University of Rochester, United States

10:00   Coffee Break

10:30 **Design Process – Define: Computation Roadmap**
More GPUs won't solve our problem: How to develop a hardware solution suitable for consumer, mobile, wearable, vehicular and other applications which comprises transmission, hardware, and software elements.

11:00 **Design Process – Define: Transport Roadmap**
5G and DisplayPort won't solve our problem: How to provide sufficient bandwidth, both from remote locations and for interconnects inside products.

11:30 Lunch

12:30 **Design Process – Define: Software Roadmap**
An API for putting interactive content freely in 3-space: What does a truly 3D display agnostic graphics API look like?

13:00 **Design Process – Define: Solution Template**
Questions to answer in working group sessions will be provided.

14:00 **Working Group Session 1 – Ideate: Brainstorm (Diverge)**
Collect a wide-ranging set of possible approaches.

15:00 Coffee Break

15:30 **Working Group Session 1 Con't. – Ideate: Brainstorm (Converge)**
Downselect and focus.

18:00 Dinner
Sette Osteria, 1666 Connecticut Ave NW

Friday, 17 January 2020

8:00 Breakfast

8:30 **Working Group Session 2 – Storyboard: Outline Hardware/Transmission**
What are the hardware and transport implications and how do we get there?

10:00 Coffee Break

10:30 **Working Group Session 3 – Storyboard: Outline Software**
What does the API look like?

12:00 Lunch

12:30　　　　**Working Group Session 4 – Consensus Recommendation**
　　　　　　　　　　Complete design comprising transmission, software and hardware.

14:00　　　　**Presentations – Oral Working Group Presentations & Feedback**

15:00　　　　**Open Discussion**

15:30　　　　Vote & Adjourn