OSA Small Eyes & Smart Minds Incubator

4-6 October 2017
Washington, DC USA

HOSTED BY:
Rama Chellappa, University of Maryland, United States
Francisco Imai, Apple, Inc., United States
Ashok Veeraraghavan, Rice University, United States

AGENDA

Wednesday 4 October 2017

Afternoon Arrival/Hotel Check-in
Residence Inn Dupont Circle, 2120 P Street, NW

18:00 Welcome Dinner
Ezmè, 2016 P St NW

Thursday 5 October 2017

8:00 Breakfast
OSA Headquarters, 2010 Massachusetts Ave, NW

8:30 Welcome
Elizabeth Rogan, CEO, The Optical Society
Suzanne E. Grinnan, Executive Director, Society for Imaging Science and Technology

8:45 Program Overview and Goals
Hosts

SESSION: SENSORS & SYSTEMS

9:00 Ultra-compact, Flat, Lenseless Microscopes
Jacob Robinson, Rice University, United States

9:30 Quanta Image Sensors
Eric Fossum, Dartmouth University, United States
Thursday 5 October 2017, continued

10:00 Coffee Break
10:30 Plenoptic Sensors for Adaptive Optics and Imaging through Distorting Turbulence  
   Chris Davis, University of Maryland, United States
11:00 Giving AR/VR Eyes and Brain  
   Jingyi Yu, University of Delaware, United States
11:30 Sensors & Systems Panel Discussion  
   Moderator: Ashok Veeraraghavan, Rice University, United States
12:30 Lunch, provided
1:30 Small Eyes Keynote  
   David Brady, Duke University, United States

SESSION: APPLICATIONS – HEALTH, AUTOMOTIVE, VR, MOBILE & SCIENTIFIC

2:30 Computational Near-eye Displays with Focus Cues  
   Gordon Wetzstein, Stanford University, United States
3:00 Multi-mission Spatiotemporal EO/IR Sensing & Perception  
   Sanjeev Agarwal, Night Vision & Electronic Sensors Directorate, United States
3:30 Coffee Break
4:00 Computational Optical Imaging at the Nanoscale & Through Scattering Materials  
   Raphael Piestun, University of Colorado, Boulder, United States
4:30 Wide-FOV Sensing & Optical Processing for Small Vision Applications  
   Sanjeev Koppal, University of Florida, United States
5:00 Exploiting the Physical Limits and Information Limits of Single-Shot 3D Sensing  
   Florian Willomitzer, Northwestern University, United States
5:30 Applications Session Panel Discussion  
   Moderator: Francisco Imai, Apple, Inc. United States
6:30 Dinner  
   Sette Osteria, 1666 Connecticut Ave, NW
Friday 6 October 2017

8:00    Breakfast
        OSA Headquarters, 2010 Massachusetts Ave, NW

8:30    Smart Minds Keynote
        Rajiv Laroia, Light, United States

SESSION: TOWARDS SMART MINDS

9:30    Dynamic Mode Decomposition for Background Modeling of Streaming Video
        Nathan Kutz, University of Washington, United States

10:00   Computational Spectral Imaging
        Aswin Sankaranarayanan, Carnegie Mellon University, United States

10:30   Coffee Break

10:50   Mobile Computational Imaging
        Alex Drimbarean, FotoNation, Ireland

11:20   Quantized Neural Networks for Hardware Implementation: A Deeper Understanding
        Tom Goldstein, University of Maryland, United States

11:50   Towards Smart Minds Panel Discussion
        Moderator: Rama Chellappa, University of Maryland, United States

12:50   Lunch and Networking Session

2:00    Adjourn