



## Advances in Imaging

July 10-13, 2017

Day	Title	Details
<b>Monday</b>		
9:30-10:00 am	Intro to Advances in Imaging - and fast forward	
10:00 am-12:30 pm	Overview of computational imaging	Algorithms and sensing in different parts of the spectrum
12:30-1:30pm	<i>Lunch on your own</i>	
1:30-3:30 pm	A practical look at the Future of AI and Imaging	Infrared, thermal imaging, millimeter wave, terahertz
3:30-5:00 pm	Camera 2025: What will the camera of the future look like?	Photography and beyond, thermal cameras, multi-spectral, high-speed cameras, and 3D range-sensing time-offlight cameras and camera arrays, visual analysis and scene understanding
5:00-7:00 pm	Sailing Pavillion Dinner - social event and networking	Meet instructors and fellow participants
<b>Tuesday</b>		
<b>AI and Machine Learning Deep Dive</b>		
9:30-Noon	Intro to AI and Machine Learning	Introduction to machine learning, clustering and classification introduction to compressive sensing and sparse representations Internet vision and online photo collections
Noon-1:00 pm	Dive into DNN	
1:00-2:00 pm	<i>Lunch at the Media Lab</i>	
2:00-3:15 pm	Dive into DNN (cont'd)	
3:15-5:00 pm	Hands on activity with Tensor Flow	
<b>Wednesday</b>		
<b>Imaging in Other Fields</b>		
9:30-11:00 am	Clinical Imaging of the Human Body	For Health, Visualization and Predictive Analytics
11:00-Noon	Design for Expert-free Health Screening	Optics and Sensors
Noon-1:00pm	<i>Lunch on your own</i>	
1:00-5:15 pm	AR/VR overview	Current technologies, the future of the field, and demo.
6:00-7:30 pm	Imaging Cafe	Monthly event bringing together researchers, engineers, and students to foster deeper conversation with entrepreneurs, mentors and investors. This gathering is for people excited about mobile camera phones, cameras in developing countries, image-search, medical imaging, online photo sharing, home automation, computational photography, 3D printing and more.
<b>Thursday</b>		
<b>Future of Imaging and the Roadmap</b>		
9:30-10:00 am	Landscape of current imaging industry	Analysis of sector versus technologies
10:00-11:00 am	Key trends and Roadmap for Imaging Applications	Team exercise to map trends of future imaging application to existing sectors
11:00 am-1:00 pm	<i>Lunch on your own</i>	
1:00-2:00 pm	Questions that will define Imaging	Defining questions that span technology, application, social impact and business opportunity
	Future products and services	Team exercise to brainstorm emerging sectors and applications, followed by short team presentations
2:00-5:00 pm	Close, Group Photo and Online Networking opportunities	