



BUENAVENTURA RAS/IAS CHAPTER

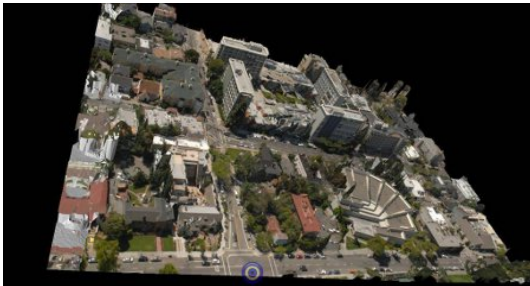
Intelligent Computer Vision for Unmanned Aircraft Systems

By Hyukseong Kwon, Ph.D.

Wed Oct 7, 2015 at 6:30 pm

101 Swenson Building on the CLU campus

Meetings are free and open to the public



Computer vision is widely present in our daily lives. From surveillance equipment that recognizes our facial attributes when we enter an airport to fingerprint recognition on our laptops, the applications for computer vision are growing fast.

In the world of Unmanned Aerial Vehicles (UAVs), computers and humans at the base earth station still provide the analytics that give airborne drones their sight. Developing systems that can extract relevant information about the scene from video, the way a human operator can, has become the next frontier to conquer. Onboard vision analytics can improve on-the-fly object tracking, autonomous navigation and coordination with other UAVs.

Our speaker, Hyukseong Kwon, Ph.D. will explain the challenges and complexity of computer vision in UAVs and present some approaches, such as sensor fusion and vision modeling, which facilitate onboard vision analytics. Work in this space has great potential for more than just unmanned aircrafts and there is great hope that the work and research in this space will change several industry segments.

Dr. Hyukseong Kwon is a Research Scientist at HRL Laboratories, LLC specialized in Computer Vision, Image Processing, Robotics, and Unmanned Aircraft Systems. His interests cover vision-based target detection and tracking, cooperative unmanned systems, sensor fusion, and vision-based 3D modeling. Dr. Hyukseong Kwon graduated with a BS/MS in Electronic Communications Engineering from the Hanyang University, a Master of Science in Computer Engineering from the University of Southern California, and a Doctorate in Engineering from the Purdue University. Dr. Hyukseong Kwon is a member of the IEEE Robotics and Automation Society and a Technical Committee Member of the American Institute of Aeronautics and Astronautics (AIAA).

Location: California Lutheran University
101 Swenson Building,
141 Faculty Street (see map on next page)
Pizza/networking starts at 6:30 pm
Talk starts at 7:00 pm
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Our sponsors
California Lutheran University
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RSVP: [at this link](#) (free event)



Directions from Ventura:

Take the Ventura Freeway 101 South
 Take Lynn Road Exit, turn left, drive 2.9 miles
 Lynn Road turns into Olsen Road, drive .9 miles
 Turn right onto Mountclef Boulevard - the University is on the right
 Turn Right onto Faculty Street
 Park on Faculty Street or adjacent streets
 Visitors may park on the streets after 7 pm without a permit.
 Important: do not park in the spots marked "Homeowner Parking only"
 Before 7 pm, we recommend to park in the G lot on the southwest corner of Olsen and MountClef and walk to the Swenson building

Directions from Los Angeles:

Take the Ventura Freeway 101 North
 Take Lynn Road Exit, turn right, drive 2.9 miles
 Lynn Road turns into Olsen Road, drive .9 miles
 Turn right onto Mountclef Boulevard - the University is on the right
 Turn Right onto Faculty Street
 Park on Faculty Street or adjacent streets
 Parking on the street is open after 7 pm
 Prior to 7 pm, Respect parking signs and do not park in faculty spots
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CLU STREET PARKING PERMIT IEEE-RAS-IA MONTHLY MEETING

THIS VEHICLE IS AUTHORIZED TO PARK ON ANY CLU STREET BEFORE 7 PM ON ANY WEDNESDAY EVENING OF THE MONTH IN CONNECTION WITH THE IEEE-ROBOTICS AUTOMATION/INDUSTRIAL APPLICATIONS MEETING ON THE CLU CAMPUS.

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