



## UAV Research and Education at Cal Poly Pomona

Technical talk

Presenter:	Dr. Subodh Bhandari, Professor, Aerospace Engineering, Cal Poly Pomona
Time and date:	6:00 -7:30 pm, Oct 25, 2018 (Thu)
Venue:	Cal Poly Pomona, Engineering Building 9, Room 409 (4 <sup>th</sup> floor)

Organized by Educational Activities Committee, IEEE Foothill, jointly with CPP IEEE Student Chapter & CPP Power and Energy Society Student Club

Please RSVP by emailing hatle@cpp.edu (Dr. Ha Le, Chair of Educational Activities Committee)

Walk-in welcome. Food will be provided. Light dinner: 6 - 6:30 pm. Talk: 6:30 - 7:30 pm.

## Highlights

- This presentation talks about the research being done at Cal Poly Pomona on increased autonomy of unmanned aerial vehicles (UAVs). Despite their potential use for many commercial missions, their use is still limited. They have not yet seen mass deployment for many applications such as agriculture. This can be attributed to both regulatory and technological challenges.
- The research projects at Cal Poly Pomona are designed for technological maturation as well as for reducing the cost and complexity of these vehicles and their operation so that the UAVs can be used for widespread applications including by the end users. These projects involve large number of faculty and students from several departments in the Colleges of Engineering, Science, and Agriculture.
- Research projects on intelligent flight controls, sense and avoid, search and rescue, agriculture, command and control of multiple UAV's, multivehicle coordination, and 3-D mapping will be presented. Efforts on training future generation of engineers and scientists will also be presented.

## **Presenter Biography**

Dr. Subodh Bhandari earned a Ph.D. from University of Kansas Aerospace Engineering. He joined Cal Poly Pomona in 2007 and was promoted to full professor in 2013. His research focuses on nonlinear control, adaptive control using neural networks, unmanned ground and aerial vehicle technologies.

He is the recipient of CPP College of Engineering *Excellence in Teaching Award, Research and Scholarly Activities Award, Innovation in Teaching Award, and Northrop Grumman Excellence in Teaching Award.* 

Dr. Bhandari has received research grants from NASA Armstrong/AERO Institute, Jet Propulsion Laboratory, US Army Research Office, and the National Science Foundation.

He is a Senior Member of American Institute of Aeronautics and Astronautics (AIAA), Member of American Helicopter Society (AHS), member of Associations for Unmanned Vehicle Systems International (AUVSI) and other technical societies.

## Parking map and guide



- Head to Kellogg Drive, Pomona city (marked in blue in the right map)
- Park in one of the parking lots (marked in the left map)
- Pay for parking at the pay station (costs around \$7) and display the parking slip in your car
- Follow the route (black line in left map) to Building 9
- Enter the building and use the elevator to go to 4<sup>th</sup> floor. Exit the elevator and turn right. Room 409 is on the left.