Monthly Dinner and Lecture

Wednesday, 17 April 2019 (6:00 – 8:00 pm)

Cloud-Based Telemetry Processing?

Dr. Chandru Mirchandani

Location: Applied Physics Laboratory, Johns Hopkins University 11100 Johns Hopkins Rd Laurel MD 20723 (Main Entrance – Lobby 1)

Presentation: Historically, ground systems for space telemetry and commanding have been developed on a mission-by-mission basis. Ground telemetry system designs were rarely reused across projects because schedule-driven development cycles did not allow for the inclusion of additional features to accommodate future mission formats and/or large varieties of operational scenarios. Because of the custom nature of these ground systems, reuse often required extensive changes in software, hardware, and firmware to meet new mission needs. A new generation of processing modules and systems using a cloud-based architecture will afford up to an order of magnitude in cost reduction and improved reliability and flexibility over present generation systems.



Speaker: Dr. Chandru Mirchandani is an INCOSE Fellow; AIAA Associate Fellow and IEEE Senior and Life Member. He has worked in the research and development of integrated circuits at Hewlett-Packard; and in the research, development, design and integration of VLSI-based telemetry systems using state-of-the-art technologies in ASIC design, PCB design and data transfer & storage for Lockheed-Martin Space Operations, at Goddard Space Flight Center (GSFC). He also was Co-Principal Investigator with Jet Propulsion

Laboratory on Intelligent Sensor and Satellite Networks for Earth Science and Exploration. Professionally, he has been technical chair for national and international symposia and conferences; invited to and participated in the Earth Science Technology Operations and Distributed Space Systems workshops in developing long range future technology needs.



Door Prize for this month
Cloud Application
Architectures: Building
Applications and Infrastructure
in the Cloud

Menu: Sesame-ginger stir fried chicken; Jasmine rice and Stir fried Asian vegetables served with garden salad, dressing, rolls and butter, Dessert Cakes and a small Fruit Plate, coffee, iced tea

Dinner Cost: Guests: \$25; INCOSE members: \$20 if payment is received by April 12th, 2019, \$25 afterwards. To pay by credit card or PayPal, visit our registration webpage for details https://www.incose-cc.org/event-registration/

Presentation ONLY: FREE at 7pm in Parsons Auditorium

Corporate Sponsor: We wish to thank the Applied Physics Laboratory for supporting the systems engineering profession through use of their facilities.

Our Evening's Agenda

5:45 – 6:00 pm Arrival and Socializing

6:00 – 6:45 pm Dinner 6:45 – 6:50 pm Meet

6:50 – 6:55 pm Chapter Business Items

7:00 – 8:00 pm Lecture

Directions: JHU APL, 11100 Johns Hopkins Road, Laurel, Maryland 20723, Phone (443) 778-5000

See APL's Visitor Guide for more: https://www.jhuapl.edu/About/Directions

From Washington DC and Capital Beltway (I-495):

Take I-95 North toward Baltimore, 10 miles to Columbia exit (MD Route 32 West),

Go 2.5 miles to the Washington DC exit (US Route 29 South).

Go 1.5 miles south and take Johns Hopkins Road exit (bear right at the top of the hill).

Or from the Capital Beltway (I-495):

Take US Route 29 North (Colesville Road) 10 miles and follow signs for the turn onto Johns Hopkins Road.

From Baltimore and Baltimore Beltway (I-695):

Take I-95 South toward Washington DC.

Go 13 miles and take Columbia exit (MD Route 32 West).

Go 2.5 miles and take Washington DC exit (US Route 29 South).

Go 1.5 miles south and take Johns Hopkins Road exit (bear right at the top of the hill).

Once you're on Johns Hopkins Road:

APL is a half-mile west of US Route 29 on your right side. Go past the first entrance, continuing past the pond and take the next right turn onto a tree-lined lane. Park in the visitor's lot on your left side. Enter at the main entrance marked **Building 1** (flagpoles and traffic circle in front).

Dinner is held in the Howard County Room #3 located at the end of the cafeteria hallway to the right of the entryway just before the Guard's desk.

