

Weds, Oct 9, 2019
Noon
USC- RGL 100

RSVP: Zhanibek Baktygali at
baktygal@usc.edu

Micro Sensor Development for Vehicle Detection and Identification for Next Generation Smart Roads



The use of machine-learning algorithms for smart roads to track and analyze traffic attributes allows for highly accurate classifications while still being scalable and flexible enough to identify new types of vehicles that have yet to hit the market. This talk centers on the development of a distributed wireless sensing network that utilizes low power processors in conjunction to “in-sensor-node” machine learning algorithms for computation and a communications protocol for the development of a lightweight low-power multi-node MEMS sensing network.

“ Currently, transportation agencies implant vehicle detection sensors underneath the road pavement to collect traffic data using inefficient, decades-old sensing systems. ”

Mohammad Mozumdar is an associate professor in the Electrical Engineering Department at California State University, Long Beach (CSULB). Dr. Mozumdar’s research interests include secure-by-design methodologies, especially in the domain cyber physical systems typically subjected to high real time, safety and reliability constraints.

CALIFORNIA STATE UNIVERSITY
LONG BEACH

RSVP required. Lunch will be served.

METRANS is dedicated to solving metropolitan and transportation problems through
research, education, and outreach.