

Mechanical Engineering Graduate Program @ UC Merced

ME291 ME Seminar Series

Presents

Automated Driving Applications

Sara Dadras, Ph.D.
Research Engineer
Ford Motor Company

Friday, August 30, 2019. 2:00-3:20pm; Location: CLSSRM 110

ABSTRACT:

According to the National Highway Traffic Safety Administration (NHTSA), in 2017 alone, the NHTSA reported 34,247 fatal crashes in the United States with 37,133 fatalities. Furthermore, as of August 1, 2019, the California DMV has received 186 Autonomous Vehicle Collision Reports. Ford Motor Company aims to help the society with not only providing the safest vehicles on the road but also making the vehicles more comfortable for the customers. Automated driving is one solution that significantly improves roadway safety. This talk gives an overview of Ford Greenfield Labs at Palo Alto, California, and reviews some areas of research in automated driving systems.

BIOGRAPHY:



Dr. Sara Dadras (IEEE Senior Member, 2018) is currently an Automated Driving Research Engineer at Ford Motor Company. Prior to that, she was a research engineer working on research and development of Plug-in Hybrid Electric Vehicle systems with respect to energy management. Passionate about vehicles, she worked on various projects including battery management systems, wireless power transfer systems, model based system design for advanced HEVs and PHEVs. Her current research interest areas include autonomous vehicles, advanced driver assist systems, hybrid electric and electric vehicles, nonlinear systems and control, and application of fractional calculus in control of nonlinear systems.

Dr. Dadras was the recipient of the 2019 Forest R. McFarland Award (SAE) and Ford 2018 R&A Technical Achievement Award (RARE Award). She is the Associate Editor of the IEEE Access, IEEE Transactions on Automation Science and Engineering, Asian Journal of Control and Conference Editorial Board member of IEEE.

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