

Tuesday, April 12, 2022, 12 Noon (PST)

Hybrid - USC RGL 308 and Zoom

***Balancing of Truck Parking Demand by a
Centralized Incentives/Pricing System*****Petros Ioannou**

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The main objective of this project is to develop a centralized truck parking system that will balance parking utilization in time and space by using full information about supply and demand. Most drivers use unauthorized parking locations at least once a week and many drivers often spend more than 30 minutes looking for parking, or park an hour earlier than required to guarantee parking, both of which reduce productivity. Yes less than 50% of truck stops reported working overcapacity, and the reported difficulties with parking usually happen between 7PM and 5AM. Despite being recognized as one of the industry's top issues, truck parking is rarely considered in routing and scheduling. We develop a central parking coordinator system capable of directing the multiple planners of the trucking industry to itineraries that will not overburden parking facilities.

USC Viterbi Professor **Petros Ioannou** is one of 11 recent inductees into the National Academy of Engineering (NAE), and has long been a leading figure within the METRANS Transportation Consortium, which he was instrumental in founding and where he serves as Associate Director of Research today. He has a B.Sc. degree from University College London, in 1978 and the M.S and Ph.D. degrees from the University of Illinois, Urbana, Illinois, in 1980 and 1982, respectively. In 1982, he joined the Department of Electrical Engineering-Systems, USC, where he is the A.V. Bal* Balakrishnan Chair and the Director of the Center of Advanced Transportation Technologies. Dr. Ioannou received many research awards with the most recent ones being the 2012 IEEE Intelligent Transportation System Society Research Award, the 2016 IEEE Transportation Technologies Field Award and the BEE Control System Society Transition to Practice Award for his work on the design and commercialization of Adaptive Cruise Control Systems. He is a Fellow of IEEE, IFAC, IT and AAAS and the author/co-author of 8 books and over 300 research papers.