# PSR<sup>2</sup>

# **2018 PSR Spring Research Seminar**

Pacific Southwest Region UTC

University Transportation Center

Monday, May 7, 2018 Reception\* from 5:00 to 5:30 PM Presentation 5:30 to 6:30 PM CSULB—Foundation Building Suite 204 RSVP to Royce De Rivera by May 1, 2018 at

royce.derivera-sa@csulb.edu

\*Includes small plates reception

#### Centralized Processing of Chassis: Modeling, Analysis and Optimization presented by Timothy VanderBeek PhD candidate in Applied Mathematics and Industrial Engineering Claremont Graduate University and California State University, Long Beach

The twin ports of Long Beach (POLB) and Los Angeles (POLA), consisting of fourteen individually gated terminals, combine to create the largest container port complex in the US. In 2015, the combined ports handled 15.4 million 20-foot equivalent units (TEUs), a 56% increase since 2000, expected to grow higher in the future. This large number of containers and the associated trips to/from the ports, result in traffic congestion, noise pollution, and greenhouse gas emissions in the vicinity of the ports. The current project studies the concept of "Centralized Processing of Chassis," and the possibility of using it to mitigate some of these problems.

### Timothy VanderBeek

Timothy VanderBeek is the Hardware Team Manager and Deputy Chief Engineer for the Electrostatically Supported Gyro Navigator Replacement (ESGN-R) program at Boeing, providing technical oversight for system requirements and architecture development, hardware/software design, and integration and test activities. Initially an Electrical Engineering Intern for Boeing in 2003, he graduated from California State University Long Beach (CSULB) as the Outstanding Electrical Engineering Honors Graduate in 2004. He returned to Boeing with the exception of a two-year leave of absence (2007-2009) to serve as a Peace Corps Volunteer in Niger, West Africa. He completed his Master of Science in applied mathematics at Claremont Graduate University (CGU) in 2014 and is pursuing a joint PhD in applied mathematics and industrial engineering from CGU and CSULB. His research is currently concentrated in the area of container terminal networks focusing on optimization of landside transport.



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## Transportation research, education, and engagement for the Pacific Southwest Region





