PacTrans presents
Professor Kelvin Wang, Ph.D.

REGIONAL TRANSPORTATION SEMINAR

Intelligent Evaluation of Transportation Infrastructure: Pavement and Bridges

Live Stream Link: https://www.youtube.com/watch?v=Vfi9WZSqLfk

Tuesday, November 7
1:00pm - 2:30pm
UW HUB 334

Automated evaluation of transportation infrastructure has become increasingly important in an era of funding limitations and climate change. This presentation focuses the recent developments of applying sub-mm 3D laser imaging technologies and Deep-Learning based solutions for both pavements and bridges. Distress surveys of pavements are a critical process to detect conditions of pavements. Bridge surface condition and Impact Factor (IM) of dynamic loading are considerations of structural safety. Details are discussed on the advances to apply state-of-the-art 3D sensors and AI techniques for the automated data processing.

All events are free and open to the public.

Kelvin Wang started his professional career in 1989 at Arizona DOT. Since 1993, he is a university faculty and researcher with substantial professional society service record. For nearly 30 years, Dr. Wang led his team to tackle the problem of automating survey of pavement distresses. His work profoundly changed the landscape of pavement survey and is closely followed by industry and researchers on worldwide basis. His technological contributions in recent years include sub-mm 3D laser imaging of pavements at full-lane coverage & highway speed for data collection, & automated data processing for distresses and safety evaluations based on unique and novel Deep-Learning techniques. His research has extended to the evaluation of bridge, rail, and other infrastructure elements, and their safety characteristics. His world-leading technologies and AI based solutions are used in several countries. In 2021, American Society of Civil Engineers (ASCE) bestowed its highest honor to Dr. Wang as a Distinguished Member of ASCE (Dist.M.ASCE).

BOISE STATE UNIVERSITY · Oregon State University · NORTHWEST INDIAN COLLEGE · UNIVERSITY of ALASKA ANCHORAGE · UNIVERSITY of WASHINGTON · Portland State UNIVERSITY · WASHINGTON STATE UNIVERSITY · University of Idaho · UNIVERSITY of ALASKA FAIRBANKS · GONZAGA UNIVERSITY