

# Autonomous Driving Algorithms Development and Testing Framework

Dr Son Tong

*Siemens*

Monday 17 May 2021

2pm

Via Teams

## **Abstract:**

In this talk, I will discuss several topics on ADAS/AV development. The first part focuses on ADAS algorithm developments toward safety and comfort driving objectives. Some use cases developments on safety-critical collision avoidance, autonomous valet parking, and human-like autonomous driving will be shown. I will also discuss approaches to combine model-based and machine learning to enhance both safety and comfort. The second part concerns ADAS testing and validation. Examples on scenario generation, virtual and mixed virtual-real testing, and proving ground track testing will be demonstrated. The works are part of Siemens Digital Industries Software ADAS/AV solutions, in particular Simcenter Engineering Services.