



CENTER FOR CONNECTED AND AUTOMATED TRANSPORTATION

Project Title	DeepScenario: City Scale Scenario Generation for Automated Driving System Testing & Evaluation	
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Most relevant CCAT research thrusts (choose all applicable)	<input type="checkbox"/> Control & Operations <input checked="" type="checkbox"/> Enabling Technology <input checked="" type="checkbox"/> Human Factors <input type="checkbox"/> Infrastructure Design & Management <input checked="" type="checkbox"/> Modeling & Implementation <input type="checkbox"/> Policy & Planning	
Funding Request	\$510,221	
Matching Funds and Source (if any)		
Total Project Cost	\$510,221	
Contract Number	69A3551747105	
Project start/end dates	03/01/2020 – 06/30/2022	
Project Abstract	<p>In this project, we will build a city-scale scenario generation and simulation platform for ADS testing and evaluation. Under different routes and environmental conditions, the simulation platform can generate testing scenarios dynamically along the route to interact with the CAV and systematically evaluate its performance. Meanwhile, a set of corner cases regarding vulnerable road users (VRUs) will be identified and added to the generated scenario library. We will leverage and extend our existing work in scenario generation and integrate it with VISSIM, CARLA, and Autoware. The platform will also be integrated with the augmented reality testing environment to enable the testing of real CAVs.</p>	
High-level implementation plan		
Project Metrics		
Web Links: [leave blank until project approval]	ccat.umtri.umich.edu	