

## A Multi-Agent Urban Traffic Simulator for Generating Autonomous Driving Training Data

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**Abstract :** This paper describes a simulator of traffic scenarios tailored to facilitate autonomous driving model training for urban environments. With the rising prominence of self-driving vehicles, the need for diverse datasets is very important. The proposed simulator provides a flexible framework that allows the generation of custom scenarios needed for the validation and enhancement of trajectory prediction algorithms. Its controlled yet dynamic environment addresses the challenges associated with real-world data acquisition and ensures adaptability to diverse driving scenarios. By providing an adaptable solution for scenario creation and algorithm testing, this tool proves to be a valuable resource for advancing autonomous driving technology that aims to ensure safe and efficient self-driving vehicles.

**Keywords :** autonomous driving, car simulator, machine learning, model training, urban simulation environment

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