Plaza - Collaborative Autonomy: Citizen Science and Autonomous Driving for Safe and Accessible Mobility



This demonstration showcases the power of citizen science in advancing autonomous driving technology. In this interactive exhibit, the audience participates in training and testing Al driving agents using a steering wheel and floor pedals. This hands-on approach excites the community, highlighting the importance of collaborative efforts in shaping the future of transportation. The audience can witness the results of their participation as the trained Al agents take control of a bus navigating along a predefined route with various stops in a real town's digital twin. This immersive experience, powered by CARLA and BeamNG.tech simulators, allows the audience to see firsthand how their contributions directly impact autonomous driving research, emphasizing citizen science's vital role in pushing the boundaries of technological innovation. By bringing together the expertise of researchers and the invaluable input of the public, this live demonstration exemplifies the synergy between academia and the community. It underscores the significance of participatory and inclusive approaches to autonomous vehicle research, breaking down barriers and fostering a sense of ownership and pride among citizens. The audience will learn to appreciate how such approaches create safe, engaging, and long-lasting mobility solutions that communities genuinely desire. The audience will also interact with "The 12st Unmanned," Texas A&M's autonomous vehicle for the GM/SAE AutoDrive Challenge. They will learn how autonomous vehicles work in general and how to use autonomous vehicles to empower transit and shared hail-riding services for underserved populations and communities.