

Geometric Issues for Self-Driving Cars

Raúl Rojas¹

¹ Freie Universität Berlin

Abstract

In my talk, I will give an overview of a new iteration of the architecture of the autonomous cars which have been developed at the Dahlem Center for Machine Learning and Robotics, Freie Universität Berlin. I will explain how we mix reactive with deliberative control. I will explain how we have experimented with geometry-based localization and the ideas we have for localization and driving under tough weather conditions. In one project we are investigating swarm behavior in traffic. At the end, I will present some ideas about the evolution of the commercial introduction of autonomous vehicles in the near future.