Open Data and Data Standards for Connected Autonomous Vehicles

Archana Venkatachalapathy
PhD Student, InTrans, archanav@iastate.edu

Skylar Knickerbocker
Research Engineer, InTrans, sknick@iastate.edu

This focus of this project is to explore and synthesize the data standards that apply to the exchange of data between entities related to the transportation industry, which are pertinent to the focus of the Iowa DOT. A thorough literature review was completed to identify the existing standards and practices relevant to open data services, center-to-center communication, center-to-vehicle communication, etc. These standards were analyzed for any overlaps and contradictions. There was also a need to develop a methodology to evaluate any such stream in terms of usability by an internet-of-things (IOT) application. An evaluation methodology was be developed to check the compliance and usability of the shared open data and an interactive dashboard was produced to explore the various open data services across all 50 states and other national portals.

Keywords: Standards, Open Data, Rubric