2017 Internship Position
Gasoline Systems – System & Advanced Engineering

Modeling Transportation Networks with Connected & Autonomous Vehicles

Overview:
System and Advanced Engineering is responsible for mechatronic and control system development involving traditional combustion engine and hybrid electric powertrains. We work with vehicle manufacturers and internal business groups to create proof-of-concepts for advanced powertrain systems, and to support ongoing development activities.

Position Description:
This internship will help define vehicle and powertrain requirements for a connected and automated world. The intern will be involved in modeling an intelligent city / highway network where the infrastructure can communicate with vehicles. Driver models, vehicle following models, and V2X communication strategies will be developed to mimic driving behavior with varying levels of automation and connectivity. The intern will focus on characterizing powertrain requirements for various vehicle types in pre-determined urban / suburban traffic scenarios.

Start Date & Duration:
Preferred start date in January 2017 with a duration of 6-7 months.

Minimum Requirements:
- Graduate student in engineering (Mechanical / Civil / Electrical or related field) with interest in automotive and controls
- Existing experience working in an academic or industrial research environment
- Experience with Matlab / Simulink
- Ability to work independently and to manage multiple tasks simultaneously

Preferred Skills and Background:
- Experience with traffic simulation
- Experience with Python and C / C++
- Experience working on automotive related projects

Contact Information:
Please send a resume to Shyam Jade (mailto:shyam.jade@us.bosch.com) with the subject “Modeling Transportation Networks with Connected & Autonomous Vehicles”.