Our growing company is looking to fill the role of vehicle dynamics. If you are looking for an exciting place to work, please take a look at the list of qualifications below.

Responsibilities for vehicle dynamics

- Study and model advanced steering system, and integrate with vehicle model
- Study the effect of vertical loading on steering efforts using nonlinear tire dynamics and design an algorithm to detect the vertical loading
- Design control methods to obtain desired vehicle response using advanced steering actuator
- Assist with in-vehicle data collection and analysis
- Study the control structure of EPS (electric power steering) system and develop/update a tool to help with control parameter tuning based on classical controls knowledge
- Develop advanced state estimation methods
- Tune vehicle steering characteristics, diagnose and correct deficiencies in designs and prototypes
- Uses rapid prototyping tools for system development
- Building vehicle dynamic simulation models by using CarMaker, CarSim, or other specified software
- Correlating simulation results with vehicle or sub-system measurements, and actively seek for ways to improve simulation accuracy

Qualifications for vehicle dynamics

- 2+ years of experience using CAE tools for multi-body dynamics or finite element analysis
- Experience in design and development of vehicle suspensions,

- 2+ years of experience using CAE tools for multi-body dynamics analysis
- Knowledge and application of control system theory acquired through university coursework or work experience
- Ability to develop custom routines (Visual Basic, ADAMS command files, ADAMS/Car templates, Altair Motionview templates, Matlab,) to support process enhancement and standardization