

Curriculum Vitae for Ron Chadwick

Education

- Bachelor of Science in Mechanical Engineering, The University of Texas at Austin, 2017.

Specialized Professional Competencies

- Dynamic vehicle testing, data acquisition, measurement, and evaluation.
- Advanced driver assistance system (ADAS) and autonomous vehicle motion performance requirements development and validation.
- Autonomous systems vehicle-level testing and evaluation.
- Autonomous vehicle controls calibration and algorithm development for model predictive controls and lateral path follower.
- Autonomous controls robustness testing, methodology, and toolset development.
- Verification and validation planning and execution.
- Root cause analysis.

Professional Experience and Qualifications

- Senior Engineer, Carr Engineering Inc., 2023
 - Perform investigations to analyze claims of product defect or malfunction.
 - Design and develop test measurement hardware for supplemental restraint systems, electronic control modules, and other related automotive components.
 - Coordinate exemplar testing, system fault tolerance demonstrations, and diagnostic performance evaluation.
 - Perform analysis of software content either through study of relevant specifications, empirical observation, or interpretation of design documentation.
 - Generate and execute component and sub-system testing protocols.
- Level 2/Level 3 Autonomy Motion Performance Core Engineer, Ford, 2021-2023
 - Lead – Lateral path follower performance.
 - Lead – Autonomous controls robustness studies.
- ADAS Motion Performance Application Engineer, Ford, 2020-2021
 - Root cause analysis.
 - Support controls team algorithm development and testing to close performance gaps.
- Level 4 Autonomy Motion Performance Engineer, Ford, 2017-2020
 - Lead – Straight line driving and motion performance, including metrics, target setting, and calibration.
 - Lead – Robustness testing, methodology, and toolset development.

Professional Associations and Training

- Member – SAE International.
- SAE International – Applied Vehicle Dynamics, 2018.