

CARR ENGINEERING, INC.

12500 CASTLEBRIDGE DRIVE
TELEPHONE

HOUSTON, TEXAS 77065-4532
281-894-8955

Curriculum Vitae for Michael W. Broad

Education

- Master of Science in Mechanical Engineering, Kettering University, 2018
- Bachelor of Science in Mechanical Engineering, North Carolina State University, 2009

Specialized Professional Competencies

- Dynamic vehicle testing, data acquisition, measurement evaluation
- Mechanical design and failure analysis

Professional Experience and Qualifications

- Senior Engineer, Carr Engineering, Inc., 2022-Present
 - Engineer responsible for motor vehicle crash reconstruction and analysis. Activities include data collection through vehicle and scene inspections, Bosch Crash Data Retrieval (CDR) download, exemplar vehicle analysis, crash investigation and reconstruction.
- Quality Final Test Engineer, ZF Transmissions, 2016 – 2022
 - Test engineer responsible for functional testing of series production automatic transmissions to improve customer delivery quality and reduce internal production defects. Focus areas included data acquisition, measurement and component analysis surrounding park systems and shift performance, as well as development of new test strategies to improve defect detection.
- Powertrain Analysis Engineer, BMW Manufacturing Co., LLC, 2010-2015
 - Engineer responsible for pre-series validation of engine, automatic transmission, driveline, and differential systems including planning, dynamic testing, measurement acquisition, data analysis, risk assessment, solution validation, and manufacturability.

Other

- Small Unmanned Aircraft Systems (sUAS) – Part 107 Drone License, 2022
- Lean Six Sigma Green Belt Certification, 2021
- SAE International - Applied Vehicle Dynamics Course, 2013
- SAE International - Fundamentals of Modern Vehicle Transmissions Course, 2011
- BMW M Performance Driving School, 2009
- Member, Society of Automotive Engineers