

WORK EXPERIENCE

FIAT CHRYSLER AUTOMOBILES

Auburn Hills, MI

- **Lead Electrical Validation Engineer - Chrysler Pacifica, Jeep Renegade, Jeep Compass** **July 2020 - Present**
 - Reduced waste in critical development timing to ensure sufficient timing for engineering changes and system level tests prior to launch by coordinating midphase alignment checkpoints for system requirements
 - Performed hands on testing of electrical system in both static and dynamic test environment including environmental testing from -20°F to 130°F
 - Launched new Uconnect 5 radio system and telebroadcast module hardware and software for 2021 Pacifica including validation trips, hands-on root cause analysis, and issue tracking through Global Issue Management System (GIMS)
 - Ensured resolution of all found electrical issues and JD Power complaints on global and carryover programs

- **Electrical Systems Integration Responsible Engineer - Chrysler Pacifica** **January 2019 - July 2020**
 - Wrote system requirements for new and existing vehicle features including Family Drive Alerts, Power Closures, Interior Intercom, Folding Seat Module and Head Restraint Stow
 - Created customer surveys and prototype systems to prove feasibility and demonstrate functionality of new features including Interior Intercom and Wireless Rear Seat Belt Reminder
 - Worked with internal customers to present data-backed decisions to senior management

FIAT CHRYSLER AUTOMOBILES, CHRYSLER INSTITUTE OF ENGINEERING DEVELOPMENT PROGRAM

Auburn Hills, MI

- **Advanced Powertrain Thermal Management** **September 2018 – December 2018**
 - Machined, instrumented and rebuilt future direct-injection engine with thermocouples; optimized second-iteration engine through coolant system testing and critical operating temperatures mapping
 - Led research initiative for integration of novel engine cooling methods; met NASA’s Technical Readiness Level 2 in 3 months

- **Jeep Grand Cherokee and Dodge Durango Product Quality Engineer** **May 2018 – August 2018**
 - Conducted root-cause analysis on customer-reported feedback for Eastern Asia-based vehicles; implemented lasting, systematic solutions through collaborative redesign of production systems
 - Maintained fleet hardware updates and software tracking for internal customer vehicles; ensured test properties were “returned to standard” for saleable product

- **Sterling Heights Assembly Plant Resident Engineer – Ram Truck** **January 2018 – April 2018**
 - Improved 2019 RAM 1500 launch “first time capability” station pass rate from 72% to 98% in 3 months
 - Performed buzz, squeak, rattle (BSR) duties for 100% of vehicles; aided in identifying root cause and systemic solution implementation for both manufacturing and design issues
 - Collected waste spare part spillage found in vehicles and on test track and created a tracking system to identify assembly station where the quality spill occurred
 - Observed assembly stations for cause of parts spillage and implemented station changes to reduce recurrence and waste

- **Vehicle Integration Engineer – Jeep Wrangler** **August 2017 – December 2017**
 - Performed electrified powertrain testing to ensure proper performance at extreme cold temperature
 - Evaluated over 130 pre-production vehicles to ensure proper performance for internal customers
 - Reported and assisted with root cause analysis for early production vehicles and implemented fixes

- **Vehicle Integration Engineer – SRT Durango** **May 2017 – August 2017**
 - Created and correlated CarSim vehicle simulation performance to racetrack data
 - Assisted with design verification plan (DVP) testing for race specific applications including track day testing
 - Participated in media events with journalists including emergency diagnosis and repair of press vehicles
- **Badge of Honor Program Manager – Jeep Brand** **January 2017 – April 2017**
 - Triageed and dispositioned Jeep Badge of Honor customer application support
 - Implemented system to fix fulfillment issues, app errors, and inventory of badges
 - Sourced new suppliers to reduce customer wait times for badging and improve program quality
- **Jeep Compass Interior Door Trim Engineer** **September 2016 – December 2016**
 - Managed manufacturing plant process inconsistencies for global Jeep Compass program on site in Mexico, India, and China
 - Utilized reactive engineering principles to find root cause of material issues in door trim components and resolve in all regions

FIAT CHRYSLER AUTOMOBILES - AEROTHERMAL ROTATIONAL ENGINEER

Auburn Hills, MI

- **Thesis: Boundary Layer Airflow Effects in Various Testing Facilities versus Road Conditions** **April 2013 – March 2016**
- **Aerothermal Rotations:** Aerodynamics (2), Thermal Simulation Validation, Heavy Duty Truck Platform System Integration Responsible, Compact US Wide Platform (Chrysler 200) System Integration Responsible, Advanced Aerothermal System Integration Responsible

SKILLS/CERTIFICATIONS

- **Basic:** DOORS, DCPlot, ETRAP, CANalyzer, MATLAB, STATA/SE, HTML/CSS, German, French
- **Advanced:** Google Suite, NX 9, CDA (Chrysler Diagnostic Application), GIMS (Global Issue Management System)
- **Courses:** Shainin Red X Reactive Problem Solving Black Belt, Kepner-Tregoe Reactive Problem Solving Green Belt, Design for Six Sigma (DFSS), Design Failure Modes Effects Analysis (DFMEA), Design Verification Plan and Report (DVP&R), Visual Basic Application (VBA)
- **Other:** International manufacturing experience in Mexico, India, China, Germany; Chinese working visa – expires 2026; PADI Open Water Scuba Certification

EDUCATION

- **M.S. Mechanical Engineering Purdue University** **September 2016 – December 2018**
 - Courses: Biomaterials, Biostatistics, FDA Quality Systems and Regulatory Compliance, Intro to Clinical Medicine, Safety Engineering, Production Management Control
- **B.S. Mechanical Engineering at Kettering University** **January 2013 – March 2016**
 - Magna Cum Laude, President’s Medal, President of Tau Beta Pi, Student Government Representative
 - Courses: CAD / CAM and Rapid Prototyping Senior Capstone, Intro to Automotive Powertrain, Intro to Biomedical Engineering Applications including experience with ISO 13485 and FDA 510k

ACTIVITIES

- **Society of Women Engineers (SWE) @ FCA** - Elected Community Chair (2020) **2016 - present**
- **Kettering University Mentoring Team** - Team lead and student mentor **2016 - present**
- **Purdue Recruitment Team** - Industrial Roundtable Recruitment Event Lead (2020) **2019 - present**
- **Toastmasters** - Participant **2019 - present**