

# SCOTT FISHER

PO Box 774, Mantua Ohio 44255  
Passionate about design engineering  
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**ACADEMIC:** North Carolina State University (NC State): (2011)  
- B.S. in Aerospace Engineering (Cum Laude)  
- Minor in Graphic Communications, concentration in Business, Fundamentals of Engineering certified (2010)

**Carnegie Mellon University (CMU):** (2012)  
- M.S. in Integrated Innovation for Products and Services (A combination of Business, Mechanical Engineering, and Industrial Design)

## SKILLS:

### DESIGN:

- *Product/User Research:* Gather customer values, facilitate customer driven innovations/upgrades, benchmark competing products, determine stakeholders/target customers, establish design requirements/deliverables
- *Product design:* Idea development, creative thinking tools, product sketching, rapid 3D prototyping, 'Fast fail approach,' facilitate collaboration to cultivate design simplicity, technical strength, product longevity, customer value, and solvent financials
- *Design implementation:* Framing and quarterbacking timing/development schedules, cross functional team management, capitalize on available resources/local capabilities, incorporate internal & external expertise, effective communication with suppliers, preventive troubleshooting. **Portfolio Work:** [www.scottfisher.us](http://www.scottfisher.us)

### ENGINEERING:

- *Strategy:* Design for manufacturing, Six Sigma, Lean manufacturing/waste reduction, cost/quality/speed optimization, DFMEA, FEMA, design reviews, task management, being organized and meticulous
- *Research:* Fencing requirements/standards be it customer driven, or gov. bodies, Reverse engineering competition
- *Product:* Materials selection, ingress protection/seals, thermal management, structural integrity/durability, electrical creepage/pollution degrees, vibe/thermal resistance, chemical resistance, simplify assembly
- *Mediums:* plastics, sheet metal, metals
- *Computer:* SolidWorks (SW), Unigraphics NX, constraint based modelling, geometric tolerance drawings, ANSYS thermal, ANSYS structural, Minitab statistical analysis, MS Project, Excel, PhotoView Rendering, SW Video

## WORK HISTORY:

### DELPHI Corp.: Warren, OH

- *Lead Mech. Design Engineer, Wireless Program* (2014-Present) Leading cross-functional team in packaging design/build for two wireless coils within rigid timing constraints/budget limits. Mechanical engineering lead for customer visits/conferences. First design to incorporate potted components/forced air option in source, for increased thermal management. Reduced overall package size by approx. 80%, and reduced mass by 17% of previous vehicle coil design. Simplified coil assembly process.
- *Design Engineer, Wireless Charging Program* (2012-14) Designed first ever Delphi 'core' and customer specific 3kW wireless charging power stations within timing constraints (also being used as basis for next gen 6kW station). Met all customer/industry standards, created all station fab drawings, managed fabrication process within budget. Designed wireless charging coils in response to auto company RFP—via inclusion of coil innovations to reduce overall size and mass.
- *Additional Roles within Delphi* (2012-present)
  - Innovation driver: Of nine patent ideas submitted for internal review, two filed with USPTO
  - Manager, Wireless Team Intranet: Reorganized and refined user interface of data management site
  - Promoted to manage Wireless umbrella site, Hybrid Car Development Intranet: Re-designed and organized for increased worker efficiency, and improved user friendly interface

### Wiser Systems Corp.: Raleigh, NC

- *R&D Development Engineering Contractor* (2013-Present) Designed a technology simulation video for client and funding pursuit. Lead design for prototype through production plastic module housing design.

### Carnegie Mellon University: Pittsburgh, PA

- *Capstone project with LoneStar Trucking:* (2011-12) RV design for young people using design for innovation strategies including user research, concept mapping, and value opportunity analysis
- User interaction design projects
- Rapid prototyping with Arduino and xBee microcontrollers, stepper motors, servos

### Firstmark Controls & ABI: Creedmoor, NC

- *Summer Contractor* (2010-2011) Created CAD assembly models and helped design a product overhaul in accordance with LEAN manufacturing and 6 Sigma principles, & IP66 ratings.
- CAD Designing and stringent product testing for Hamilton Sundstrand space station hardware
- Designed a new drastically simplified user friendly web-page order code system

### North Carolina State University (NC State):

- Lead design and structural analyst for Retractable and Deployable Tumbleweed Mars rover. (2010-11)

## HONORS:

- Promoted from level 4 Delphi Engineer to 5 (2014)
- 1<sup>st</sup> place in Delphi innovation competition (2012)
- 4<sup>th</sup> place in national NASA University Student Launch Initiative (USLI) (2011)
- Sigma Gamma Tau Aerospace Engineering Honors Society (2010)
- AIAA Senior Design Regional Conference (2011)
- 1<sup>st</sup> place in NC State Design Day competition (2006)

## PATENTS:

- Pending patent for wireless charging graphic user interface structure: DP-320588
- Pending patent for wireless charging alignment method: DP-320566, WO2014077896A1

## TEAM LEADER:

- Tech lead for team 'CMU' in Delphi innovate comp.
- Coordinated state wide Tacho Lycos logo contest
- Rowing team from 2002-2012 (high school-grad)
- Lead outreach officer on NC State Rocketry club, coordinated/presented to over 900 people including NASA, Research institutes, Schools, etc.