

# Sam Melton

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Design engineer with 1.5 years of experience at Honda R&D and a background in human-centered transportation research. Eager to apply strong research and prototyping skills through a User Experience Researcher position at Honda R&D.

## Contact

smelton@oh.hra.com

937-309-9287

linkedin.com/in/sam-melton/

5351 Mystic Falls Dr. Dublin, OH 43016

## Skills & Software

User experience research, prototyping, graphic design, statistics, programming  
Axure RP, Adobe Creative Cloud, R/RStudio, CATIA  
V5/ENOVIA PLM, Microsoft Office.

## Certifications

### Interaction Design

UC San Diego

*September 2019 – December 2019*

Specialization covering UX principles including need finding, ideation, prototyping, graphic design, experiment design, statistics, and psychology. Consists of 7 courses and a capstone project.

### Institutional Review Board Human Subjects Protection Training

Virginia Tech

*May 2017*

## Education

### BS, Mechanical Engineering

Virginia Tech

*August 2013 – May 2018*

## Experience

### Engineer II, Airbag and Steering Wheel Design |

Honda R&D

*June 2018 – Present*

Design PIC for 2TN side curtain airbag and 2VA/2TN Driver Airbags

- Managed design, validation, schedule, cost, manufacturing, and quality of airbag assemblies while ensuring compliance with US and international safety standards
- Created prototypes of design concepts in CATIA to evaluate feasibility and communicate design intent
- Researched competitor side curtain airbag designs to identify opportunities for cost and mass reduction
- Redesigned the F2 division H drive folder system. Conducted user research and created wireframe to develop a more intuitive folder structure and improve user experience
- Working on improvements to user interface for automatic Honda-style schedule-building tool made in Excel/Visual Basic

### Data Reductionist | Virginia Tech Transportation Institute

*June 2017 – May 2018*

Observed, analyzed, and documented driver behavior and driving situations using video and data collected for government and proprietary human-centered transportation research projects.

### Research Assistant | Virginia Tech Transportation Institute

*September 2017 – October 2017*

Assisted participant study on driver interaction with backup cameras for VTTI's Center for Advanced Automotive Research.

### On-Road Experimenter | Virginia Tech Transportation Institute

*September 2017 – October 2017*

Assisted participant study on night-time driving visibility for VTTI's Center for Infrastructure-Based Safety Systems.

### Project Manager | Virginia Tech Electric Go Kart Team

*August 2017 – May 2018*

Led senior design team of 7 mechanical engineering students in designing, manufacturing, and testing a fully electric go kart.

- Placed 1st in energy efficiency and 3rd in design at the 2018 EV Grand Prix at the Indianapolis Motor Speedway