Yashar Sadaghiyani

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EDUCATION

University of Michigan, *Mechanical Engineering*

September 2018 - (Expected) May 2022

- GPA: 3.9/4.0, Dean's List, University Honors
- Electrical Engineering Minor
- Manufacturing Concentration

PROFESSIONAL EXPERIENCE

Tesla Inc, *Vehicle Engineering Intern – Center Console Design*

May 2021 – August 2021

- Owned design (CatiaV5) of structure, main kinematic mechanisms, decors, and inductive charging phone dock on new Model S/X center console.
- Designed tooling changes (new resins, gating strategies, and part geometry) to improve dimensional stability of parts (reduced warpage up to 10mm).
- Kicked off long term tool changes to address large manual reworks saving upwards of $100,000 over launch of the product.
- Decreased fallout of parts by 20% by visiting tier 1 supplier's factory in Mexico to address quality issues coming from assembly line.
- Worked on factory line to eliminate any quality issues seen at EoL on initial builds (stopped 100%) with reworks and build instructions.

Tesla Inc, *Vehicle Engineering Intern – Center Console Design*

January 2020 – August 2020

- Designed push-push deploying cupholder mechanism, saving $12 piece price ($600,000 annually), for new Model X interior refresh.
- Troubleshot, designed, and kicked off tooling for charger mechanism using cyclic testing/SLS prints to solve durability/craftsmanship specifications.
- Achieved dimensional stability, a-surface, and manufacturing requirements for load bearing/aesthetics parts of console via material selection.
- Solved volume, tolerance stack up, and assembly requirements by tightly packaging cupholder with other assemblies in the console.
- Maximized durability of console throughout lifespan of product by performing DFMEA and creating abuse loading targets.

EXTRA-CURRICULAR ACTIVITES

Formula SAE Electric Team, *Vehicle Dynamics and Chassis Engineer*

September 2018 - Present

- Worked on team of fellow students to design (Siemens NX), manufacture, and assemble the chassis and suspension for competition purposes.

PERSONAL PROJECTS

3D Printing

- Created (SolidWorks) household items - chess set, vise, desk organizer - and printed using FDM (modeled with Cura).

SKILLS

DESIGN

CATIA V5 | Siemens NX

SolidWorks (CSWA)

DFM | DFA | DFMEA

FEA

ANSYS | MSC Adams

FABRICATION

Injection Molding

Mill | Lathe | CNC

Laser Cutting | Water Jet

SLS | SLA | FDM

Powder Coating/Baking

GD&T | Drafting

WELDING

TIG Welding | Soldering

Ultra-Sonic Welding

Plasma Cutting

PROGRAMMING

C++ | MATLAB

Tecplot 360

Ultimaker Cura

LANGUAGES

English | Farsi

PHOTO EDITING

Adobe Suite Photoshop

AWARDS

William Branstrom Prize

Awarded to college of engineering freshman placing in 95th percentile.

AFFILIATIONS

Society of Automotive Engineers

American Society of Mechanical Engineers