



TREY PETITJEAN

Louisiana State University - GPA: 3.1
Bachelor of Science - Mechanical Engineering (2021)

University of Louisiana at Lafayette - GPA: 3.4
Bachelor of Science - Industrial Design (2012)

Fox Factory - Senior Industrial Designer (September 2022 - Present)

- Designed and developed complete concept visions for Fox Factory's portfolio of up-fitted trucks, including several specialty vehicles that defined new brands and re-defined the directions of existing ones.
- Collaborated with suppliers and in-house engineers to break down visions into buildable assemblies, ensuring DFM/DFA compliance for multiple manufacturing methods, including injection molding, sheet metal fabrication, thermoforming, and carbon fiber processes.
- Produced detailed illustrations for use in product development presentations, as well as prepared said presentations to effectively communicate design intention across multiple exterior teams, such as sales, marketing, Fox athletes, and project managers.
- Ensured brand fidelity on new and special projects by developing strategies / product stories as a foundation for each product's design process, which was used as the catalyst for discussion amongst other designers and company stakeholders.
- Performed independent research to inform potential product directions through work trips, chassis teardowns, online research, and inquiries to experts that could represent the targeted customer.
- Established best practices and created tutorials for design skills related to office productivity, including Vred render file organization, universal part & data organization, presentation standards, 3D scanning, and animation.

M3 Design - Mechanical Engineering Intern (August 2021 - January 2022)

- Collaborated with senior engineers and project managers to design, develop, and prototype products such as medical diagnostic equipment, emergency room tools, and accessories for products in the casino industry.
- Created and modified several types of technical drawings for design release, including machined parts, sheet metal parts, mechanical reference PCB drawings, plastic parts, cables, and assembly drawings.
- Designed subassemblies, prototypes, and product test jigs using top-down modeling / master modeling methods to develop product layouts that can be easily edited and cascade changes through all parts in an assembly.
- Leveraged industrial design skills to co-lead the design of lighting accessories for products in the casino industry, assist in brainstorming sessions to provide creative but mechanically feasible ideas for user-related problems, and created quick but detailed design sketches for product forms and mechanical features.

Protostripes - Prototyping Engineer (May 2018 - August 2021)

- Collaborated with local inventors on developing functional designs for product ideas, specifically on designing and manufacturing proof-of-concept prototypes.
- Performed research on potential product competition and available technologies, designing for various industries such as pool equipment, child safety, automotive accessories, hunting products, and audio equipment.
- Exercised design thinking skills to resolve design issues both on the conceptual level of the product's development as well as the technical level.
- Took charge of managing all aspects of client projects, including specifying parts and materials, logging tasks and hours, creating / modifying all CAD related work, and preparing parts for manufacture in the prototyping workspace.

Skillsets

Solidworks • Autodesk Inventor • Alias • Vred • Complex Surface Modeling • Adobe Creative Suite • DFM/DFA • Microsoft Office • Project Management • Technical Drawing • 3D printing • Rapid Prototyping Technologies • Design Sketching • Presentation Development • Storytelling • Concept Generation • Design Strategy • Illustration • Digital Painting • 3D Scanning

Special Courses

Additive Manufacturing - Fall 2019 • Internal Combustion Engines - Spring 2021

Accolades

3 industrial design projects selected to be used as set props for the 2012 film "Looper" • 2010 Design Excellence Award - UL Lafayette • 2011 Design Merit Award - UL Lafayette • 2012 IDSA UL Chapter Merit Award Nominee - UL Lafayette