

Henri Stephan

<https://www.madebyahen.com/> | (415) 999-1776 | henristephan@gmail.com | Manhattan Beach, CA

EDUCATION

San Diego State University, College of Engineering

Bachelor of Science in Mechanical Engineering

May 2023

Dean's List: Fall 2020 – Spring 2023

Elective Coursework: Automotive Power, Sensor Tech, Mechanical Vibrations, System Modeling

ENGINEERING EXPERIENCE

Divergent Technologies

Torrance, CA

Additive Machine Technician

September 2024 – Present

- Operate and troubleshoot array of SLM 3D printers and all associated machinery up to part removal.
- Maintain meticulous documentation using Manufacturo, Jira tickets, and internal software.
- Identify EHS and process improvement opportunities and propose viable solutions.
- Assist CNC machining and process teams when needed during sprints.

ZIP Launchpad Rapid Prototyping Lab

San Diego, CA

Product Design Intern

September 2022 – August 2023

- Supported the design and development of various products from idea to functional prototype.
- Utilized CAD, 3D printing, laser cutting, CNC routers, and various handheld tools.
- Researched new manufacturing methods and created standard operating procedure for resin casting.

San Diego State University Aztec Racing FSAE Team

San Diego, CA

Design and Manufacturing Team Lead

September 2022 – May 2023

- Tasked with creation of regenerative braking test bench for Aztec Racing to refine R.B. control system.
- Created mathematical models to calculate target power and energy values, CAD models, and used FEA tools.
- Manufactured parts using a water jet, hand and CNC lathes, 3D printers, and TIG welding.

INDEPENDENT PROJECTS

Topographically Optimized Drone Frame

February 2024 – April 2024

- Drone frame designed using topographical optimization to maximize strength to weight ratio.
- Removed about 60% of mass from original design while maintaining strength and rigidity.

Programmable Hangboard

April 2024 – May 2024

- Device to assist strength training for rock climbers.
- Uses timed light sequences to guide the hand placements, number of sets, and length of each set.
- Can be programmed with a multitude of workouts which are easily switched between with the press of a button.

Flat Packing Furniture

November 2023-December 2023

- Designed to reduce production and shipping costs, easily produced using a laser cutter, router, or water jet.
- Can be assembled in under a minute without need for fasteners or adhesive.
- Tested to over 250 pounds when made of single-wall cardboard.

BMW E30 "Restomod"

May 2022 – August 2022

- Installed a M52b28, Z3 steering rack, and 3.73 LSD into a 1987 BMW 325es using OEM BMW components.
- Maintained BOM and studied part schematics to keep within budget and find part compatibilities.
- Conversion was completed for under \$2000, has done over 50,000 miles since project completion.

ADDITIONAL EXPERIENCE

Scribe Winery

Sonoma, CA

Tasting Host

June 2021 – June 2024

- Pitched and sold wine club memberships, maintained positive customer relations, educated guests on wine.

SFYC Youth Sailing Program

Tiburon, CA

Sailing Coach

June 2015 – August 2017

- Created lesson plans, supervised and instructed kids on the water, ensured the safety and enjoyment of the students.

TECHNICAL SKILLS

PTC Creo (Pro/Engineer), SOLIDWORKS, Fusion360, MS Excel, MATLAB, Arduino code, Manufacturo, Jira, Mathematical modeling

Additional Skills: Teaching, Consultation, Sales, Bi-lingual French/English