Brian Peoples

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Objective: Full time position in **mechanical engineering** with an emphasis on injection molded products. Penchant for driving designs that drive higher yield.

Education:

University of Massachusetts Amherst
Master of Science in Engineering Management — Expected Sep 2024, GPA: 4.0
Bachelor of Science in Mechanical Engineering, Minor in Engineering Management — Graduated May 2023, GPA: 3.53

Relevant Coursework:

Design of Mechanical Components & Assemblies, Manufacturing Processes, Probability and Statistics for Engineering Problem Solving, Industry Sponsored Mechanical Design (Capstone), Engineering Leadership & Entrepreneurship (Capstone)

Work Experience:

Analog Devices, Inc., Wilmington MA (Security Clearance Level: Secret)
Manufacturing Engineer — July 2024 - Present
Associate Manufacturing Engineer — June 2023 - June 2024

- DRI for ramping NPI program; frequent customer reviews of program direction (customer-facing)
- Successfully delivered on customer FY24 PPAP: full-process PMFEA, ATP Gage R&R, and process capability study
- Driving design & process respins, improving RTY ~10%: mechanical assembly (DFM), wire-bond, supplier related
- Leading supplier PWA qualification, includes design reviews, metrology bring-up, traceability and control plans
- Guiding supplier dimensional improvements via DWG reviews and OMM workmanship procedures
- Instilling in-process quality for mechanical assembly via visual aids, preventative maintenance, and OCAPs
- QMS tools (yield bridges, CAR/NC Apps) Mentoring: JMP, Minitab, MATLAB, GD&T (ADI University Instructor)

Apple Inc., Cupertino CA
Manufacturing Engineer Intern (TechOps) — May 2022 - June 2023

- DRI throughout Vision Pro build cycle; therefore, responsible for quality readiness from POC to ramp for NPI program
- Brought up in-process laser weld monitor and CCD to supplier to ensure product safety and traceability
- Drove DFM creation for motorized load cell button tester consisting of electromechanical components and fixturing
- Conducted FA and root-cause-analysis to address lagging yield in injection molding process to improve on scrap
- Improved upon yield targets for Clear Case (~90%), Silicon Case (~98%), and Vision Pro Frame Assembly (~95%)
- Worked with PD team to define product drawing dimensions and datums, following ASME Y14.5
- Designed metrology with reliance on DOE/Gage R&R for dimensional and functional measurement capability

SharkNinja LLC, Needham, MA
Mechanical Test Engineer Co-Op — Summer of 2021, 2020, and 2019

- Fabricated metrology solutions to aid product functional testing both in development and production
- Guided engineering team with process tuning DOEs to meet specs. as defined on the drawing with low DPPM
- Validated production test procedures while working with overseas vendor to realize full Gage R&R <10-30%
- Performed R&D into angular displacement recognition rendering using MATLAB image analysis summer of 2021
- Used MATLAB App Developer for image compiling to mimic color spectrometer usages during summer of 2020
- Utilized Minitab for statistics including boxplots, paired-t tests, DOE, ANOVA, tukey turner, and regression models.

Academic Projects:

Stationary Conductor Tension Monitoring System (Team Lead) — September 2021 - May 2022

- Directed a team of engineers in design, fabrication, and analysis to achieve a functioning POC by spring of 2022
- Researched and designed a process to measure vibration of a cable in motion, rendering live tension measurements
- Minimized error through model testing and omitting operator interference through automation
- Conducted meetings with sponsored company regarding project scope and direction, weekly AOI reports, and timeline

Motor Gearhead Design — February 2021- May 2021

- Created scaled sketches of a Maxon A-max 6 W motor assembly and gear train containing 4 stages
- Optimized motor gearhead to be used in an industrial motion controller without bending or surface failure
- Utilized ANSYS to realize design that included fitted gear casing, stress cycle life, and other preset conditions
- Understood and utilized provided operating conditions and material properties in all key failure calculations

Key Skills:

CAD – SolidWorks (CSWA Certified, Ref C-X4AT7B38DH), Statistical Analysis Tools – Minitab / JMP, Design – GD&T (CTQ/SPC/FAI/ASME Y14.5 Coursework), MATLAB – GUI Building / Data and File Management / Data Analysis Tools / Image Analysis, Design Failure Mode and Effects Analysis – DFMEA, Quality Improvement Tools / Methodologies – Gage R&R studies / Design of Experiment, Project Management – Agile / MS Project, Material Analysis – XRF, Libs, and SEM