Alexander Oh

oh.alexj@gmail.com ● (650) 815-8771 ● alex-oh.github.io

SKILLS

CAD Design: SolidWorks (CSWA), EPDM, Draftsight, Unigraphics NX, NX Nastran
Software: Python, Arduino, SAP ERP, MATLAB, LabVIEW, JMP
Physical: 3D Printing, Basic Machining, Laser Cutter, Instron Tensile Tester

EXPERIENCE

Mechanical Engineer, *Entegris*
San Luis Obispo, CA | Jul '20 - Present
- Revise purifier models, BOMs, and drawings as part of continuous improvement efforts, resulting in $18,000+ in savings and reduced cycle times for affected orders
- Primary project engineer for palladium purifier products. Create project BOMs & drawings for new orders and address engineering rework issues

Integration & Test Engineering Co-op, *NASA Jet Propulsion Laboratory*
Pasadena, CA | Jan - Jun '19
- Primary engineer for design & delivery of vacuum chamber testbed plates used to hold 1000 lbs of rock samples for Perseverance Rover drilling tests
- Used FEA simulations (NX Nastran) and hand calculations to assess structural integrity of testbed equipment in various loading conditions

Consumer Product Engineering Co-op, *Bose*
Framingham, MA | Jan - Jun '18
- Conducted tests to quantify ear tip pull-off force & Nitinol torsion spring clamping force; correlated data with user-based comfort/usability studies
- Utilized PDCA cycle method to reduce user comfort study cycle times by 50% for Bose Lean Enterprise Yellow Belt certification

Manufacturing Engineering Co-op, *Analogic*
Peabody, MA | Jan - Jun '17
- Wrote assembly procedure for flagship medical CT scanner power distribution unit
- Designed fixture (Solidworks) that improved storage of shrink tube spools in assembly areas

PROJECTS

Towed Antenna Buoy for BIOSwimmer UUV, *Capstone*
- Created initial buoy design (Solidworks) incorporating a gimbal mechanism that suspended Wi-Fi module 6" above water to improve wireless performance
- Drafted validation testing procedures and defined criteria for success

Ergonomic Trumpet Support
- Designed (NX) an ergonomic block which attached to trumpet valve casing, enabling comfortable trumpet playing with one hand
- Prototyped designs using SLA 3D printer, laser cutter, machine shop tools

EDUCATION

B.S. in Mechanical Engineering, *Northeastern University*
Boston, MA | Dec '19
GPA: 3.83/4.00