Charlene Lam

Contact

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Skills

Design Software

KeyShot
Adobe Illustrator
Adobe Photoshop
Adobe InDesign
Adobe XD
Figma

Prototyping

FDM/SLA 3-D Printing
CNC/Manual Milling
Laser Cutting
Shop Tools
Design for Manufacturing
Design for Assembly
Tolerance Analysis

Engineering Software

Siemens NX
SOLIDWORKS
Onshape
AutoCAD
MATLAB
JMP
GOM Correlate
Arduino

Characterization Tools

Spectrophotometer
Digital Image Correlation
High-Speed Cameras
Multi-Axis Load Cell
Drop Tower
CT Scanner
Anechoic Chamber
Accelerometers

Experience

Apple | Mac R&D Product Design Engineering Intern
Jan – Aug 2024 • Cupertino, CA

- developed early-stage Mac architecture within the Characterization and Advanced Prototyping branch of Mac R&D supporting exploratory products and concepts

- collaborated with Mac industrial design, human factors, and user study teams to develop research-driven design solution and presented advancements to management weekly

- led end-to-end prototyping from design in Siemens NX to the fabrication of over 100 unique parts manufactured with metals and plastics furthering new architecture ideation

- supported system and module level programs through hands-on prototyping and data analysis, establishing clear next steps in novel and ambiguous environments

- documented contributions on five module components in DOEs and SOPs to streamline downstream processes, ensuring consistency in project execution and data integrity

Lyndra Therapeutics | Mechanical Design Co-op
Jan – Jun 2023 • Watertown, MA

- conducted and analyzed advanced materials research involving post-processing techniques and improving fatigue resistance of the program to over 3x the baseline

- developed and built a 130+ part assembly utilizing SolidWorks to integrate pneumatic and mechanical electrical parts, furthering R&D of commercialization efforts

- produced detailed mechanical drawings while collaborating with machine shops for design fabrication, optimizing performance and functionality of parts

- enabled novel testing capabilities through the design and implementation of spectrophotometer fixtures for characterizing unique compound materials

Generate | Industrial Designer
Jan – Dec 2023 • Boston, MA

- contributed to Northeastern's product development studio working with RoboUmp on a portable strike and ball detection system and AutoPasser on a hockey-passing machine

- led CMF design, form factor development, and user experience through analysis of competitor products, user testing, Onshape CAD, 3D printing, and KeyShot renders

- designed GUI and branding in Adobe Illustrator and XD, integrating user feedback with color theory and principles to produce visual identities reflected in the products

- presented project outcomes at Generate Showcase, engaging with over 500 attendees

Education

Northeastern University | B.S. in Mechanical Engineering and Design
Sep 2021 – May 2026 • Boston, MA

Concentration in Experience Design, GPA: 3.8/4.0

Relevant Courses

Design Process Context and Systems, Color and Composition, Typography II, Print Production, Figure Drawing, Mechanics of Materials, Dynamics, Thermodynamics