# Adam Luk

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## **EDUCATION**

**Northeastern University** 

Boston, MA

M.S. in Engineering Management (GPA: 4.00)

May 2025

B.S. in Mechanical Engineering, Minor in Mathematics (GPA: 3.87)

May 2024

Awards/Activities: Summa Cum Laude, ASME, Baja Motorsports, Generate, NEU Weightlifting, Pi Tau Sigma Honor Society, MakeHarvard, Russell T. Lowe Scholarship, GEO Grant, GSE Dean Scholarship

Relevant Coursework: Computation & Visualization for Data Analytics, Deterministic Operations Research,

Economic Decision Making, Engineering Probability & Statistics, Engineering Project Management, Object-Oriented Design,

Product Development for Engineers, User Experience Design & Testing, Norway Energy Systems Study Abroad

### **WORK EXPERIENCE**

**Amazon Robotics** 

North Reading, MA

Hardware Development Engineer Co-op

Jul 2024 – Present

- Contributing to the manipulation team for Amazon Robotics' Sparrow in enhanced automation and product deployment in fulfillment centers
- Created program strategy for root cause analysis on key features and communicated findings with external stakeholders
- Identified critical internal/external issues and implemented prototyping projects for simplification and cost-reduction

MORSE Corp

Cambridge, MA

Product Design Engineer Co-op

Jun 2023 - Oct 2023

- Launched rapidly assembled designs for bi-weekly flight test and aerial systems for upcoming customer demo deadlines
- Analyzed post-test evaluations to enable design changes resulting in reduction in error for US military contract
- Defined product vision and roadmap for material science scale-up in rapid-testing with **product requirement documents** outlining key features determining success criteria

# Walmart Advanced Systems & Robotics (Alert Innovation)

Andover, MA

Hardware Product Manager Co-op

**Jun 2022 – Dec 2022** 

- Rallied senior engineers to **scope**, **prioritize**, **and resolve** 75+ **admin flow issues** and fix accessibility reports for 4 teams to be implemented in 15+ sites nationwide (Flown to several domestic sites to oversee rework)
- Conducted A/B test on design features for 200,000+ products leading to a 70% decrease in failure modes and an increase of 9,000+ monthly customer orders.
- Translated business needs with Software and Manufacturing teams in developing a Data Matrix Test Stand and 15+ designs for 45% increase in consistent detection and RFID acceptance of totes
- Created product documentation rework for workstation changes based on failure mode and effect analysis from testing feedback and managed team to launch massive rework saving \$100,000 monthly from maintenance delays

#### **EXTRACURRICULAR**

## Pi Tau Sigma Mechanical Engineer Honor Society

Boston, MA

Vice President & Treasurer

Apr 2023 - Present

Optimized data management processes in Excel for 100+ members, streamlining dues collection and improving overall efficiency

**American Society of Mechanical Engineers** 

Boston, MA

Vice President
Apr 2023 – Apr 2024
Coordinated with 30+ partnered engineering firms (Apple, Tesla, SpaceX, etc.) to create workshop programs for 800+

# College of Engineering, Northeastern University

engineering students to gain technical skills and co-op opportunities

Boston, MA

Thermal Systems Analysis & Design T.A.

Sep 2023 – Apr 2024

Hosted office hours to facilitate student understanding, coordinated with professor, and graded assignments

# **Brain Stimulation & Simulation Lab**

Boston, MA

Undergraduate Researcher

Oct 2023 - Jan 2024

- Facilitated user studies from clinical cognitive experiments to **define requirements** in developing a digital biomarker for cognitive health by detecting changes in person's mild impairment using captured smartphone data
- Trained in reading and restructuring image segmentations of MRI scans/datasets resulting in 40% increase in efficient construction of head models and decreasing processing time of 2+ hours per model

## **SKILLS & INTERESTS**

Certifications: SolidWorks Associates/Professional | Six Sigma Green Belt | AWS Cloud Practitioner

Skills: Adobe Creative Suite, Arduino, Asana, AutoCAD, BigQuery, Cantonese/Mandarin, Confluence, FEA, Figma, GitHub,

Google Analytics, HTML/CSS, JavaScript, Jira, MATLAB, Miro, Python, SQL, Tableau, Microsoft Office, Notion

Miscellaneous: 3-D printing, CNC, Laser-cutting, Lathe, Instron, Mill, Injection Molding, Sheet Metal Design

Hobbies & Interests: Baking, Dragon Boat, Lion Dance, Hiking, Startups, Reading, UI/UX, F1, Olympic Weightlifting, Running