

William Lam

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EDUCATION

Texas A&M University

Aug. 2024 – May 2028

Bachelor of Science in Mechanical Engineering, Double Major in Math — GPA: 3.95/4.00

College Station, TX

- **Coursework:** Calculus 3, Differential Equations, Linear Algebra, Partial Differential Equations, Electricity and Magnetism, Geometric Modeling, Circuits, Statics, Thermodynamics, Fourier Series
- **Awards:** Dean's Honor Roll, Distinguished Student, Ideas Challenge Finalist

EXPERIENCE

Applied Materials

May 2026 - August 2026

Mechanical Engineering Intern

Austin, TX

- Advanced **atmospheric robotics** systems to improve wafer handling efficiency and semiconductor tool reliability
- Oversaw **mass cycle reliability testing** and wrote **Python** scripts to analyze and visualize collected data
- Built **6** robots and ran **PID loops** to gather frequency data and implement design upgrades and optimize **DFM**
- Retrofitted **test stands** to replicate cleanroom conditions, facilitating the performance evaluation of new products
- Drafted **CAD models and drawings** with **NX** for robots and directed supplier communications to buy hardware

Macrofab

June 2025 - August 2025

SMT Line Operator (Manufacturing Engineering Support)

Houston, TX

- Finished over **300** orders of **5000+** **PCBs** via machine training with **95% OTD rate** and **< 5% RMA** rate
- Improved throughput by **200%** by shifting from same-day starts to a **2-week** advanced planning model
- Applied **SolidWorks CAD** software to design a sorter device improving station productivity by **20%**
- Implemented conveyor belt system to production line **doubling** the number of jobs being run at once

Texas A&M University

August 2025 - December 2026

Undergraduate Teaching Assistant

College Station, TX

- Mentored a cohort of **100+** engineering students in programming by reinforcing problem-solving skills in **Python**
- Conducted weekly reviews to provide feedback on how to debug, write functions, and create web applications
- Managed grading for **100+** **students'** assignments and exams, and proctored 2 in-person exams and 12 quizzes

PROJECTS

EDEN | Robotics, Mechanical Design, SolidWorks, Ansys, Ollama, Isaac Sim

August 2025 - December 2025

- Utilized **SolidWorks CAD** software to design a chassis for a robot, extending range of motion by **360** degrees
- Engineered real-time vision-based control loops using **OpenCV**, reducing system latency by **25%**
- Integrated **Ollama** for local LLM inference within **NVIDIA Isaac Sim**, enabling dynamic decision-making
- Analyzed previous mechanical design errors to design new prototypes, improving power efficiency by **37%**

Mechanical Toy | Mechanical Design, SolidWorks, 3D Printing, Laser Cutting, DFMA

August 2025 - May 2026

- Executed the full lifecycle design of a toy, utilizing **DFMA** techniques to optimize component geometry
- Modeled **20+** unique components in SolidWorks, designing custom gears, linkages, and structural elements
- Utilized **FDM 3D printing and laser cutting** to iterate on component designs for optimal performance and fit
- Generated detailed **2D engineering drawings** and managed the **Bill of Materials** to track component costs

LEADERSHIP

TAMUhack

April 2025 – Present

Logistics Lead Director

College Station, TX

- Coordinated two of Texas's largest hackathons, attracting **800+** participants from **40+** universities
- Secured **\$80,000+** in sponsorship money by managing communication between TAMUhack and companies
- Directed the nation's second largest hardware hackathon for **150+** participants, providing mentorship on microcontrollers and prototyping

TECHNICAL SKILLS

Design & Methodologies: NX, SolidWorks, MATLAB, Ansys, GD&T, DFM/DFA, FMEA, FAI, BOM, Root Cause

Programming & Web: Python, C++, TypeScript, React, Flask, HTML/CSS, Linux/WSL, Git/Github

Manufacturing & Prototyping: 3D Printing, Laser Cutting, Soldering (SMT/THT), Milling, Hand Tools