

Nathan Ramirez

East Hartford, CT | ramirez.nathan1014@gmail.com | (860)-597-8919

Education

Boston University

Boston, MA

Relevant course work: Differential equations, Engineering Robotics, Chemistry II, Anatomy & Physiology, Engineering Design, Physics II

Bachelor of Science in Biomedical Engineering & Concentration in Robotics

September 2023-May 2027

Northeast Medical Institute

East Hartford, CT

Phlebotomist certification

June 2025- July 2025

Experience

Gems Home Improvement

Hartford, CT

Contractor and Contract Negotiations

May 2022 - February 2025

- Served as a translator in Spanish and Portuguese, enabling over 50 successful negotiations between property managers and contactors
- Worked onsite in lumber, welding, and general construction, contributing to complete a major project one year ahead of schedule
- Produced and implemented electrical box layouts and wiring plans for three commercial buildings, ensuring compliance with safety codes

CVS Retail Associate

South Windsor, CT

Front Store Clerk

March 2023 - January 2024

- Managed inventory restocking across more than 20 product categories, maintaining full shelves and reducing stockouts by 13%
- Processed and fulfilled over 300 online orders, ensuring 100% accuracy and timely customer pickup
- Reorganized store layouts during opening/closing to improve customer flow and performed daily perishable audits across all departments
- Assisted 50+ customers per shift in product selection, providing bilingual support and personalized recommendations

Projects

Surgery Gantry Robot

- Designed modular surgical gantry robot with 3 interchangeable toolheads, computer vision (>92% recognition accuracy), and sub-millimeter precision (<0.8 mm).

Remote Controlled 'BattleBot'

- Built ESP32-powered combat robot with custom controller, spring-launcher weapon generating >30N force, and ruggedized electronics; competed in 3+ tournaments.

Eye Tracking Software

- Developed a functional eye tracking software that was operable out of Matlab within a brief period of 4 hours for a time sensitive assignment and is able to be adjusted for sensitivity and polarity

Full Portfolio available upon request

Skills

Coding Languages: C++, Python, Java

Software Skills: MATLAB, Canva, Microsoft Teams, Onshape, Solidworks, Cad Drawing, Arduino IDE, ORCA slicer, BambuLab, KICAD

Technical skills: Soldering, Welding, Microcontroller programing, 3D printing, Laboratory Equipment Training

Language Skills: Fluent in English and Spanish, Working knowledge of Portuguese and Italian