

Elian Juarez

Phone | email | city, ST | LinkedIn URL

Design-oriented engineering student seeking opportunities to apply foundational electrical and mechanical skills within the medical devices sector to solve quality of life issues for those with physical disabilities.

EDUCATION

Elon University | Elon, NC

May 2025

Bachelor of Science in Engineering (Biomedical); Minors: Chemistry and Neuroscience

Honors: Phi Eta Sigma | President's List | Dean's List

Relevant Coursework: Physics I,II | Multivariate Calculus and Analytical Geometry | Differential Equations | Engineering Design for Service | Engineering Mechanics (Statics, Dynamics) | Structure and Properties of Materials | MATLAB | Circuits | Human Physiology

INTERNSHIPS

RTI Surgical | Greenville, NC

June 2023 – August 2023

R&D Intern (Remote)

- Documented methodologies, interpreted data, and created reports to be presented to quality leadership
- Reviewed relevant research on product trends to contribute toward commercialization of products for medical applications

ENGINEERING DESIGN PROJECTS

August 2022 – December 2022

Three-Pronged Grabber Tool – Professor Jonathan Su – Advisor

Engineering Design for Service project to create a grabbing tool for someone with limited grip strength.

- Designed and 3-D printed models for testing using SOLIDWORKS and Ultimaker Cura to scale models
- Submitted and awarded grant to produce final product

RESEARCH PROJECTS

August 2023 - Present

Performance Testing on Chained-Particle Magnetic Polymers for Soft Robotics

Dr. Benjamin Evans – Advisor

Project goal is to understand chained-particle magnetic materials to optimize current magnetic materials and develop new formulations that can be used for innovative applications.

- Built automated vibrating sample magnetometer (VSM) and a torque magnetometer
- Created novel magnetic polymers containing ordered chains of magnetic particles that are more responsive than regular unchained-particle materials

CAMPUS & COMMUNITY INVOLVEMENT

Elon Engineering Club | Elon, NC

August 2021 – Present

Co-Leader of Build Team for upcoming Flywheel Trebuchet Project

LEADERSHIP

Fellowship of Christian Athletes – Mentor-Member

August 2021 – Present

Elon Orientation Team, Volunteer

July 2021 – August 2021

SKILLS

Programming Languages & Software Applications: C/C++ | Python | Java | MATLAB | SOLIDWORKS | AutoCAD

Languages: Spanish (conversational)

OTHER WORK EXPERIENCE

Elon MATLAB Teaching Assistant

August 2022 – January 2023

- Assisted undergraduate engineering students develop and learn coding skills in MATLAB