Ari Willig

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Education

Duke University, *Pratt School of Engineering*   Durham, NC
- BSE in Biomedical Engineering / BA in Computer Science   May 2026
- Cumulative GPA 3.53 / 4.00

Coral Reef Senior High School   Miami, FL
- *SAT scores*: Math 790 | Reading / Writing 760
- Cumulative GPA 4.00 / 4.00

Professional Experience

Zimmer Biomet *Manufacturing Intern,* Warsaw, Indiana   Summer 2025
- Developed new racking system to solve the issue of passivation stains on blades due to acid pooling
- Took a new product line through the testing process to create a cleaning validation for production
- Built out FALs for tools in polymer molding and updated a procedure to fix an weighting issue when forming plastics

Skeletal Dynamics, *R&D Intern,* Miami, FL   Summer 2024
- Developed medical device instrumentation for the proximal humerus through SolidWorks that allows surgeons to repair high part proximal humerus fractures
- Created PDS, BOM, and Risk Analysis documents for the design history of instruments
- Machined out of specification parts and used heavy machinery to create necessary components for my design

Segura Lab, *Researcher,* Durham, NC   2022 - 2025
- Studying the formation of Neurospheres in hydrogel scaffolds (MAPs) and the effect of increasing void space on cell survivability

Ortho PRO Associates, *Intern,* Miami, FL   2020 - 2022
- Assisted in the evaluation, fabrication, and fitting of artificial limbs
- Assembled prosthetics using acrylic resin, carbon fiber, thermoplastics, silicone, aluminum, and titanium

Motorola Solutions, *Intern,* Plantation, FL   Summer 2019
- Studied elements of mechanical engineering and sound wave transmission used to design satellite phones and worked with a team to design a forest fire prevention drone and build an electric model car

Academic Extra Curriculars / Relevant Projects

Duke Enable, *Club Member,* Durham, NC   2022 - Present
- Designed and 3D printed a functional prosthetic arm for amputees in the local community

HouseCourse Web Design*, Durham, NC   Fall 2024
- Designed a fully functional and shipped web application using Ruby on Rails and React

Medtech Design, Durham, NC   2024-2025
- Designed and prototyped CAD devices, Arduino based lightboxes and event-driven state machines using engineering principles and C++ code

Leadership and Community Service Experience

SAFTA, *Founder,* Miami, FL   2019 -2023
- Led a team of volunteers in assisting the elderly in navigating technological difficulties
- Visited elderly homes and did house calls to allow seniors to learn how to use their devices to better connect with family members and friends

Relevant Coursework, Skills, and Interests

Coursework: Multivariable Calculus, Differential Equations, Physics Mechanics and Electromagnetics, Mechanics of Solids, Quantitative Physiology and Biostatical Applications, Intro to Python, Java Data Structures and Algorithms

Language: Fluent in both English and Spanish

Computer Skills: Fluent in Java; proficient in Python, C, C++, and Microsoft Suite; proficient in SolidWorks, Onshape, and CAD design

Interests: Rock Climbing | Guitar | Basketball | Yoga | Reading