

RYAN CALLAGHAN

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EDUCATION

Stevens Institute Technology

Bachelor of Engineering, Mechanical Engineering

Concentration: Biomedical Engineering

GPA: 3.97; Honors: Dean's List, President's List, Presidential Scholarship

Relevant Coursework: *Manufacturing Processes and Systems, Engineering Design, Machine Dynamics and Mechanisms, Control Systems, Modeling and Simulation, Mechanics of Solids, Dynamics, Materials Science, Probability and Statistics, Heat Transfer, Engineering Economics*

Expected May 2022

Hoboken, NJ

Staten Island Technical High School

NYC Specialized High School (STEM)

Weighted GPA: 102.11; Honors: President's List, National Honor Society

Relevant Coursework: *AutoCAD, Robotics, Mechanics, Electricity and Magnetism, Russian Language*

June 2018

Staten Island, NY

SKILLS

Technical: SOLIDWORKS, Creo, ANSYS, Linkages, LabView, MATLAB, Simulink, AutoCAD, Arduino, Microsoft Excel, Microsoft Office, Bluebeam, 3D Printing, Technical Drawing/Drafting, C++

Other: Excellent leadership skills, communication skills, team-oriented

Certifications: Autodesk AutoCAD Certified, CPR, Lifeguarding/First Aid/ AED Certified

WORK/VOLUNTEER EXPERIENCE

Wearable Robotics Lab

Assistant Researcher

- Assisted in the research and development of a smart insole for populations with gait disorders to assist with functional rehabilitation, diagnosis, and assessment of movement disorders and injury prevention.

January 2021- Present

Hoboken, NJ

WDF Inc.

Drafting Intern

- Learned and further developed skills such as AutoCAD 3D modeling, Bluebeam, and Microsoft Excel.
- Hands on experience with the creation and review of mechanical drawings.
- Successfully communicated with the Project Manager and Assistant Project manager to complete a series of given tasks.

Summer 2020

Mount Vernon, NY

South Shore Swimming Club/ Stevens Institute of Technology

Lifeguard/Swim Instructor

- Learned and maintained proficiency in first responder skills such as First Aid and CPR to offer individuals in distress support.
- Successfully communicated to and taught kids from the ages of 3-18 how to swim.

May 2015- Present

Hoboken, NJ/Staten Island, NY

College of Staten Island/ Hoboken Highschool

Special Needs Swim Instructor (Volunteer)

- Helped teach kids with developmental, physical, and learning disabilities how to swim.
- Required patience, commitment, and strong communication skills to get kids to cooperate.

2014- Present

Hoboken, NJ/Staten Island, NY

ACADEMIC PROJECTS

Portfolio Viewable at ryancallaghan.github.io

Stevens Institute of Technology

Robot Project

- Designed Robot both mechanically and electrically to perform a variety of tasks given by instructor.
- Used Arduino to program the code the robot used to complete certain tasks.

Weather Station

- Hands on Experience with sensors and data acquisition systems recording values of light, humidity, and temperature.
- Used Solidworks and 3D Printing software to design optimal structure to protect weather monitoring system.
- Programmed the system to publish data to an online server, and then used LabView to retrieve, and elegantly display this data.

Speaker Crossover Network

- Used MATLAB and Simulink to design a network which would amplify input audio, and then separate this input into high and low frequency ranges using filters.

ACTIVITIES

Stevens Men's Varsity Swim Team- Team Captain

Collegiate Student Athlete

- Able to Balance the grueling academic work of an Engineering Student with the dedication and effort required of a collegiate athlete.
- Developed a strong work ethic, communication skills, and teamwork abilities to be successful in academics and athletics.

2018-Present

Tau Beta Pi - Engineering Honor Society

Kappa Sigma- Fraternity