

# Ryan Callaghan

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## EDUCATION

### Stevens Institute Technology

Bachelor of Engineering, Mechanical Engineering

Master of Engineering Biomedical Engineering

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

Relevant Coursework: Engineering Design, Probability and Statistics, Medical Device Design and Technology, Biomechanics, Medical Instrumentation and Imaging.

Expected May 2022

Expected Dec 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++, Minitab

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

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

## WORK EXPERIENCE

### Ethicon Inc.

Research and Development LCM Co-op

- Drafted design verification reports to validate the expansion of the suture product VICRYL to be made and sold in a new manufacturing site in China complying with their industry standards.
- Assisted in the procurement and analysis of suture diameter testing data ensuring compliance to the USP standards using the Minitab software.
- Conducted marketing research on competitor data to compare suture diameter oversizing, building an argument to increase our allowed diameter size.
- Used Solidworks to model old parts and find the needed dimensions.
- Attended daily team meetings on different projects to give and receive deliverable updates.

June 2021- Present

Raritan, NJ

### 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.

Spring 2021

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.
- Weekly meetings with the Project Manager and Assistant Project manager to go over deliverables.

Summer 2020

Mount Vernon, NY

### South Shore Swimming Club/ Stevens Institute of Technology

Head Lifeguard/Swim Instructor

- Assisted in managing lifeguard staff and over 500+ families who belong to the club.
- Conducted chlorine, pH and other chemical tests hourly to ensure safe pool conditions.
- 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

## ACTIVITIES/ VOLUNTEERING

### 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

Hoboken, NJ

### College of Staten Island/ Hoboken Highschool

Special Needs Swim Instructor (Volunteer)

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

January 2014- Present

Hoboken, NJ/Staten Island, NY

Tau Beta Pi - Engineering Honor Society

Pi Tau Sigma- Mechanical Engineering Honor Society

Kappa Sigma- Fraternity Member