# FREDERICK KOZLOWSKI

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## EDUCATION

**Stony Brook University** *May 2019*

B.S. in Mechanical Engineering & Computer Science

Dean's List
University Scholar
Winner of 3D the Campus
Overall GPA: 3.1

## EXPERIENCE & PROJECTS

**Con Edison** 2014 - 2015
*Data Analyst Intern* *Brooklyn, NY*

· Analyzed data using Excel and used conclusions to change work procedures, such as sharing facilities between contractors and employees.

**Residential Safety Program** 2017 - 2017
*Field Worker* *Stony Brook, NY*

· Ensured the safety of each residential quad through walking patrols.

**Research in Mobile Robotics** 2016 - Present
*LIDAR Data Analysis and Map Merging* *Stony Brook, NY*

· Used ROS in a Linux environment to implement Simultaneous Localization and Mapping (SLAM) on Pioneer 3DX robots to develop occupancy grid mapping software
· Used YOLOv2 neural network framework for object detection and map merging

**Stony Brook ASME** 2016 - Present
*Fabrication Team Leader* *Stony Brook, NY*

· Developed the frame for a go kart using Autodesk Inventor (CAD)
· Used TIG welding, machining and hand tools to assemble the frame
· Selected and installed components such as electric motors and motor controllers

**Columbia University FSAE** 2016 - 2017
*Welder and Designer* *New York, NY*

· Oversaw design in SolidWorks (CAD) and fabrication of the clutch handle device
· Designed an electro-mechanical actuator system aided by a programmable control unit
· Worked alongside welding team to assemble car using TIG welding

**RC Flying Club** 2015 - Present
*President and Founder* *Stony Brook, NY*

· Taught members how to solder, work with electronics and use CAD to build and modify RC vehicles

## TECHNICAL STRENGTHS

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|---|---|
| **Computer Languages** | Java, Python, Excel VBA, MATLAB, ROS |
| **Skills** | 3D printing, CAD, Arduino, Electronics, Welding |
| **Lanugages** | English, Polish |