# FREDERICK KOZLOWSKI

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# **EDUCATION**

# Stony Brook University

May 2019

B.Eng. in Mechanical Engineering, Pursuing EIT, Overall GPA: 3.0 Dean's List, University Scholars, Winner of 3D the Campus

### WORK EXPERIENCE

# Lemnis Technologies

May 2018 - August 2018

Singapore

· Developed world's first video pass-through Augmented Reality for a varifocal platform.

- · Integrated a stereo camera, a varifocal Virtual Reality headset and hand detection camera to create a demo which was shown at SIGGRAPH, the largest computer graphics conference.
- · Worked in OpenCV, Unity (C#), MATLAB, HLSL to increase perceived comfort by 60%.

Con Edison

June 2014 - June 2015

Intern

Intern

Brooklyn, NY

- · Analyzed data using Microsoft Office Excel to determine bottlenecks in power cable service box flush operations.
- · Created a facility sharing scheme which would result in a 23% efficiency gain.

#### **PROJECTS**

RC Flying Club

September 2015 - September 2018

Stony Brook, NY

President and Founder

- · Pioneered safety regulations for RC vehicles along with SBU Health and Safety.
- · Taught members how to solder, work with electronics, and use CAD to model and design RC vehicles.

#### Research in Mobile Robotics

October 2016 - September 2018

LIDAR Data Analysis and Map Merging

Stony Brook, NY

- · Used ROS to implement SLAM on P3DX robots to develop occupancy grid mapping.
- · Used YOLOv2 neural network framework for object detection and map merging.

#### Stony Brook ASME

October 2017 - May 2018

Stony Brook, NY

Fabrication Team Leader

- · Developed the mechanical design for a go kart using 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

September 2016 - February 2017

New York, NY

Welder and Designer

- · Oversaw design in SolidWorks and fabrication of the clutch handle device.
- · Worked alongside welding team to assemble car using TIG welding.

# TECHNICAL STRENGTHS

Skills PTC Creo, Autodesk Inventor, SolidWorks, 3D Printing, Welding, Writing
Relevant Courses
Languages PTC Creo, Autodesk Inventor, SolidWorks, 3D Printing, Welding, Writing
Piping Systems, Energy Technologies, IC Engines, Advanced Fluid Mechanics
English, Polish