

# Anton Yanovich

✉ anton.yanovich@hotmail.com | 📞 +1 (412) 315-8398 | 🔗 <https://antonyanovich.com/> | <https://github.com/belivan>

## EDUCATION

### Carnegie Mellon University

Master of Science in Mechanical Engineering | GPA: 3.98/4.0

Pittsburgh, PA

May 2024

### The George Washington University

Bachelor of Science in Mechanical Engineering, Minor in Business | GPA: 3.68/4.0

Washington, DC

May 2023

**Completed Coursework:** Modern Control Theory, Nonlinear Control, Machine Learning, Computer Vision.

**Current Coursework:** Visual Learning & Recognition, Robot Learning, Advanced Engineering Computations (C/C++).

## SELECTED PROJECTS

### Thermal Sensing Integration

April. 2024 - Present

*AirLab, Robotics Institute, Carnegie Mellon University*

*SOLIDWORKS, C++, Python, Teensy, ROS*

- Spearheading integration of stereo thermal sensors to improve autonomous navigation in diverse weather conditions.
- Utilizing SOLIDWORKS to design and fabricate custom sensor mounts.
- Implementing data synchronization and system compatibility using Teensy and ROS.

### Offroad Autonomous Vehicle Control

Mar. 2024 - May 2024

*AirLab, Robotics Institute, Carnegie Mellon University*

*C++, Python, LibTorch, ROS, CMake*

- Developed an efficient control system in C++, doubling computation speed and enhancing decision-making.
- Implemented the system with LibTorch and CMake, ensuring consistent performance through extensive simulations.

### Synthetic Dataset Generation for Offroad Navigation

Feb. 2024 - May 2024

*AirLab, Robotics Institute, Carnegie Mellon University*

*Python, PyTorch*

- Refined and advanced image translation methodology for creating high-quality synthetic images that aid in vehicle navigation training.
- Worked with various generative models, such as diffusion and GAN-based, to achieve reliable image generation via PyTorch.

### IoT Public Health Device Concept

Aug. 2022 - May 2023

*Capstone Design Project, George Washington University*

*SOLIDWORKS, Arduino, C++*

- Spearheaded the multidisciplinary design and development efforts of a disease-tracking and sanitization device.
- Designed physical prototypes via SOLIDWORKS with motion and temperature sensing integration.
- Contributed to the development of data processing software by enabling data collection and transfer with Arduino.
- Conducted market research to improve the project's commercial viability for startup contests.

## PROFESSIONAL EXPERIENCE

### Biofluids and Dynamics Lab, George Washington University

Washington, DC

*Summer Research Fellow*

*June 2021 - Aug. 2023*

- Led the design and assembly of hardware components for cardiovascular flow modeling experiments, showcasing strong project management and practical engineering expertise.
- Collaborated closely with machine shop staff and mentors to enhance the efficiency of manufacturing and assembly processes, resulting in significant improvements to the overall project timeline.

### Drone Point Solutions

Washington, DC

*Product Engineering Intern*

*Jan. 2022 - Sept. 2022*

- Generated insight into the EV and power management industries by performing in-depth research on relevant technologies.
- Presented viable designs and solutions for rapid drone charging with a focus on customer requirements.

## LEADERSHIP & VOLUNTEERING

### Section Chair

Washington, DC

*American Society of Mechanical Engineers (ASME), George Washington University*

*Sept. 2021 - May 2023*

- Successfully revitalized and led the ASME student chapter, significantly enhancing its presence within the university community.
- Developed and maintained strong relationships with faculty and peers, supporting the chapter's networking and professional development opportunities.

## SKILLS

### Programming Languages:

Python, C/C++, JAVA, LaTeX, MATLAB, HTML

### Libraries:

PyTorch, Numpy, Pandas, OpenCV, OpenGL, Matplotlib, Scipy

### Environment/Tools:

Windows, Linux, ROS, AWS, Jupyter, MS Office

### CAD Tools:

Inventor, SOLIDWORKS, SolidEdge, SketchUp

### Languages:

English (fluent), Russian (native), French, Romanian.