NICHOLAS BURCH

(585) 629-6647 | nburch2@buffalo.edu | www.linkedin.com/in/nicholas-burch6

OBJECTIVE

Aerospace and mechanical engineering student seeking learning experiences. Hoping to bring current technical abilities and inquisitive attitude to a challenging environment to develop both new and existing skills

EDUCATION

BS: Aerospace and Mechanical Engineering (Double Major), University at Buffalo, The State University of New York, May 2025

- Junior, **GPA: 4.0**, Honors College member, Achieved Dean's List

EXPERIENCE

Communications subsystem member, University at Buffalo Nanosatellite Laboratory, Buffalo, NY: August 2022 - September 2023

- Investigate potential components to be used for the communications system of the POLAR satellite, composing findings into trade studies
- Ensure communications system will be able to transmit data between the Earth and satellite at a sufficient data rate, verified through calculations performed in an Excel worksheet
- Communicate with fellow subsystem members to organize team goals and to divide up work

Customer Service Associate, Walgreens, Honeoye Falls, NY: January 2022 - August 2022

- Addressed customer concerns by actively listening, determining the underlying issue and implementing the most appropriate solution
- Guided new staff members through learning the Point-of-Sale interface, along with all other relevant duties
- Performed cashier duties and assisted with store maintenance

SKILLS

- MATLAB Coding Experience
- Microsoft Word, PowerPoint, Excel Experience
- Project Team Experience
- SOLIDWORKS CAD Software Experience

ACTIVITIES

- Intramural soccer, Spikeball club
- Leadership experience: Honors College mentor, Intramural soccer team captain

PROJECT

Turbine Design Project

- Collaborated on a team of four to design and test a power producing wind turbine given a few base materials
- Designed and conducted single factor and multi-factor experiments in order to determine optimal configurations for a variety of design factors such as blade angle, blade material, and gear configuration
- Presented final model to a panel of professional engineers and professors using PowerPoint