AHARON SEBTON

▶ Status: Electrical engineering student seeking a full-time job beginning summer 2022

▶ Interests: Robotics, Image & Signal Processing, Audio/Sound Engineering

▶ Skills: MATLAB/Simulink, C/C++, Assembly, Python, Verilog/VHDL, ROS, Altium Designer, CAD

Design, Visual Studio, Quartus, SPICE, Soldering, Office 365

Activities: Guitarist, Singer, Running, Cooking, Woodworking, Origami

Work Experience

Aug 2020 - **Orientation Program Assistant** Aug 2021

Rochester Institute of Technology

- ▶ Collaborated with a team of ten assistants and two orientation program coordinators
- ▶ Organized and distributed personal protective equipment and merchandise for new students during the COVID-19 pandemic
- Transported materials and set up stations for orientation events held throughout the week

Jan 2020 -July 2020

Hardware Design Engineering Co-op

Collins Aerospace

- Team member of a process-oriented hardware test and development group
- ▶ Assisted in the qualification testing and FAA approval of flight deck control panels for the Comac ARJ21-700 and Bombardier CRJ700
- ▶ Used Jama to document requirement based testing, DxDesigner to update schematics, and Subversion for version control

Aug 2018 -Aug 2019

Orientation Leader

Rochester Institute of Technology

- Responsible for welcoming approx. 20 new students and their families to RIT
- ➤ Coordinated with supervisors to help new students move into and adjust to their new living and learning environment

Education

Aug 2017 -Dec 2022

BS/MS Degree, Electrical Engineering with focuses in Robotics and Signal & Image Processing

Rochester Institute of Technology

- ➤ Currently learning: Butterworth/Chebyshev/Elliptic filter design; image compression algorithms; controlling robots using frame transformations, ROS, Python scripts
- Graduate research: Create neural network, train arm robot to organize its workspace
- ▶ Learned time management, financial management, and leadership skills by serving on the executive boards of three musical clubs on campus
- **▶** 3.53 GPA

Projects

May 2021 - Present

Pediatric Test Mannequin

Rochester Institute of Technology

- ▶ Unterthered test mannequin retrofitted with orientation sensors, inertial measurement units, force sensitive resistors, and load sensors
- Designed to test the safety and user comfort of the Motorized Pediatric Stander Kit as well as other mobility aids

Oct 2020 -Dec 2020

LeRoy the Encouragement Dependent Robot

Rochester Institute of Technology

- ▶ Differential drive mobile robot built using MABL Bot chassis, Teensy 4.0 microcontroller, and H-Bridge IC. Programmed in C++ using VS Code
- ▶ Follows lines using IR sensor array. Avoids obstacles using ultrasonic sensor. Incremental encoders control speed
- ▶ Sound sensor used to detect clapping or cheering. Different audio volumes map to different robot traveling speeds