

Murray Elinson

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- EDUCATION:** **Stevens Institute of Technology**, Hoboken, NJ **GPA:** 3.96/4.00
Bachelor of Engineering in Mechanical Engineering, May 2023
Coursework: Robotics, Control Systems, Mechatronics, Machine Dynamics and Mechanisms
- SKILLS:** **Software:** LabVIEW, SolidWorks, Creo, Ansys, MATLAB, Simulink, Caesar II
Programming Languages: C, Python, JavaScript, HTML
- PROJECTS:**
- Hand Drumming Automaton (Sponsored by L3Harris)** *September 2022– Present*
- Designed the striking mechanism consisting of a linkage and a cam and follower
 - Produced a robot that can play different notes with varied dynamics, rhythms, and tempos
 - Finalist in the 2023 ASME Student Mechanism & Robot Design Competition
- Table Tennis Launcher** *January 2022 – May 2022*
- Created a mechatronic system that uses motors to feed and launch ping pong balls
 - Achieved a launch speed of roughly 10 m/s which properly served the ball across the table
 - Adhered to the design constraints of weight, cost, and functionality
- Amplifier and Filter Cross Over Network for a Speaker System** *January 2021– May 2021*
- Developed a passive speaker cross over network to separate the low and high frequencies
 - Constructed the design in Simulink with an amplifier and a 3rd order Butterworth filter
- Office Environment Monitoring System** *January 2020 – May 2020*
- Generated a system to monitor light, temperature, and humidity in an office space
 - Built an Internet of Things sensor system to publish data to a server using the MQTT protocol
 - Analyzed and visualized data gathered from the server in a LabVIEW program
- Mobile Robot** *September 2019 - December 2019*
- Programmed an Arduino board with C to communicate with motors and ultrasonic sensors
 - Assembled a robot which navigated a course by making contact with the target switches
- LEADERSHIP:** Eagle Scout Rank, Boy Scouts of America **Collegiate Rock Climbing (President)**
Sigma Phi Epsilon Social Fraternity (Philanthropy) **Tau Beta Pi Engineering Honor Society**
Pi Tau Sigma Mechanical Engineering Honor Society **Order of Omega Honor Society**
- EXPERIENCE:**
- Phillips 66 Bayway Refinery**, Linden, NJ *Summer of 2022*
Maintenance Engineering Intern
- Provided technical recommendations with engineers to the contractors and business team
 - Modeled and analyzed the APS transfer line for replacement to profit \$20 million per year
 - Arranged a drone inspection of a flare structure with civil and maintenance engineers
- Rooney's Oceanfront Restaurant**, Long Branch, NJ *Summers of 2019, 2020, 2021*
Bar back and Server
- Supplied alcohol and other supplies to the bar to meet the demand of the customers
 - Coordinated with bartenders and other servers to optimize restaurant efficiency
 - Engaged with customers to provide a pleasant dining experience
- The Gravity Vault**, Middletown, NJ *March 2018 - August 2019*
Instructor
- Used belay devices and rope systems to ensure the safety of the climber
 - Taught classes on how to properly use belay devices for top rope use in the gym
- Shrewsbury Carwash and Oil Change**, Shrewsbury, NJ *February 2017 - November 2017*
Lube Technician
- Performed oil changes and other mechanical services on motor vehicles
 - Communicated with other technicians to complete a swift oil change