

Joseph Shneyderman

shneyderman.j@northeastern.edu | (978)-631-9014 | Website: [jshney.github.io](https://github.com/jshney) | LinkedIn: [jshneyderman](#)

Education

Northeastern University

Exp. Graduation: May 2024

College of Engineering

B.S. Mechanical Engineering

Coursework completed: Thermodynamics, Statics, Material Science, Cornerstone for Engineering 1-2

Coursework in progress: Fluid Mechanics, Dynamics, Mechanics of Materials, Robot Dynamics and Controls

Extracurricular activities: Northeastern Electric Racing – Drivetrain and Manufacturing

Work Experience

DEKA R&D ROXO Project– *Manchester NH*, Data Collection Specialist

May 2021-Present

- Collected and curated 1,000,000+ images to better improve machine learning models for object detection and traffic light recognition.
- Assembled 12 unique testing machines to facilitate terabytes of data collection.
- Utilized Python to automate processes within collection and curation saving 2+ hours per collection effort.
- Organized data pipeline to achieve efficient workflow.
- Headed a small team to parse through 3 terabytes of archived data, curating for specific instances.
- Facilitated 2+ test runs per day of robotic delivery systems, providing detailed feedback post-test.

Panini Pizza Co. – *Middleton MA*, Delivery Driver/Cashier

August 2018-2020

- Delivery driver and cashier, facilitated \$2,000+ of sales daily, processing up to 130 orders a night.
- Communicated with staff and customers despite language barriers, showcasing hospitality work ethic and perseverance.

Projects

Northeastern Electric Racing

September 2021-Present

- Collaborated on a team to design test cases for the differential to make sure that casing material would not degrade while operating.
- Machined 15+ different parts for the battery box, motor controller shelf and other various projects.

3D Printing

November 2021-Present

- Designed and printed 40+ unique parts for personal and professional use. Learning the basics of 3D printing and the design process.

Robots

2021

- Fabricated a medicine delivery robot, utilizing an Arduino and 4 servo motors to eliminate close personal contact between hospital staff and patients, as a means of reducing the spread of COVID-19.
- Developed and fabricated a robot incorporating 2 Arduinos to take and log customers' orders, reporting to the kitchen and delivering the orders back to the customer.

AerospaceNU

September 2020-21

- Learned about rocketry and helped design a liquid fueled rocket engine, using kerosene and liquid oxygen as fuel/oxidizer.

Audi Motor Replacement

June 2019

- Repaired an Audi from a non-running state to a functional state. Replaced motor and other failing components. Collaborated with a fellow engineer to restore the vehicle with self-learned knowledge, incorporating troubleshooting skills.

Skills

Programming: C/C++, Python

Skills: Arduino, Robotics, CAD, Microsoft Office Suite, SolidWorks, MATLAB, 3D-Print Experience, Linux, Image Processing, Lab Experience, Manual Milling, Horizontal and Vertical Bandsaw, MIG Welding

Languages: German and Russian

Volunteer Experience

German National Honors Society *Co-President*

2019-2020

- Led interactive lessons in German for a group of 5 middle school students.
- Organized 10+ community-based events, volunteering 5+ hours a week.