

TREVOR HESS

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Education

Rochester Institute of Technology

Rochester, NY

Master of Engineering in Mechanical Engineering (Biomedical Focus)

August 2016 – December 2021

Rochester Institute of Technology

Rochester, NY

Bachelor of Science in Mechanical Engineering | Immersion: Public Relations & Advertising

August 2016 – December 2021

GPA: 3.86/4.00 (Dean's List: August 2016 – December 2021)

Relevant Coursework: Lean Six Sigma Fundamentals | CAD & Manufacturing | Manufacturing Processes & Engineering | Manufacturing & Supply Chain | Leadership, Ethics, & Sustainability | Biomechatronics | Biorobotics/Cybernetics | Biomaterials | Microfluidics | Biology | Probability & Statistics | Computer Science

Engineering Experience

Regeneron Pharmaceuticals

Rensselaer, NY

Process Sciences Associate I

January 2022 – Present

- Leveraging my skills to improve human performance, health, and longevity.

Integrated Nano-Technologies

Rochester, NY

Manufacturing Engineering Intern

May 2021 – August 2021

- Presented an automation proposal to reduce cycle time by 24.3% and increase production capability by 31.3%.
- Designed pipette fixtures using SolidWorks and 3D printing, increasing manufacturing time by 29.4%.
- Designed a fixture for assembly process, decreasing reach by 66.7% and ultimately improving ergonomics.
- Compiled work instructions, BOMs, and SOPs, as well as performed market research, feasibility studies, statistical validation activities (IQ/OQ/PQ) on biomedical equipment, ultimately familiarizing myself with ISO standards.

GE Global Research

Niskayuna, NY

Edison Engineering Intern

September 2020 – November 2020

- Developed a power system stability analysis tool using MATLAB to analyze up to a 1000-node system.

TTM Technologies

Syracuse, NY

Process Improvement Engineering Intern

January 2019 – August 2019

- Carried out a DoE experiment, implementing various Lean Six Sigma principles such as root-cause analysis, 5S, and FMEA, ultimately saving \$274.74 per additional step in the manufacturing process.
- Automated part of the assembly process utilizing UR robots and PLC programming, ultimately reducing test time by 9%, as well as saving 16% of the operator's time and 315 labor hours per year.
- Designed fixtures for storage using DFM and GD&T principles, increasing workspace area by 17.5%.

Respiratory Technologies Laboratory

Rochester, NY

Undergraduate Researcher

May 2017 – August 2017

- Performed statistical analysis using Excel to quantify changes in electronic cigarette designs for an FDA proposal.

Projects

System for Tracking Basketball Shooting Form and Performance

January 2021 – December 2021

- Team lead for my senior capstone project, focused on developing a system to track basketball shooting form and correlate it to shooting performance by utilizing non-intrusive body sensors and 3D motion capture.

Lean Six Sigma Yellow Belt DMAIC Project

August 2021 – December 2021

- Group-based project simulating DMAIC process as part of obtaining my Lean Six Sigma Yellow Belt.

Classifying Participant Age from ECG Signals Using Machine Learning Methods

January 2021 – May 2021

- Implemented multiple machine learning methods in Python to classify participant age using participants' ECG data, ultimately achieving a classification accuracy of 93.19% using a Linear SVM.

Additional

Software: SolidWorks | Creo | Python | MATLAB | SQL | Minitab | PLC | AutoCAD | GD&T | CNC | Microsoft Office

Educational Honors: Outstanding Undergraduate Scholar Award | Tau Beta Pi | Pi Tau Sigma | RIT Honor Society

Campus Activities: Tutor | Notetaker | Personal Trainer | Course Instructor | Fitness Attendant | Phi Kappa Psi

Certifications: Lean Six Sigma Yellow Belt | NASM-CPT | NASM-PES | Adult/Pediatric First Aid/CPR/AED Certified