Steven Klinefelter

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SUMMARY

Junior mechatronics engineering major pursuing individual projects and research opportunities in the fields of robotics and machine intelligence. Gained practical experience in manufacturing, GNU/Linux systems, 3D printing, and neural networks through educational and professional experiences in high school and college.

EDUCATION

Elizabethtown College| Elizabethtown, PA   *expected* May 2025
BS Engineering | Mechatronics Concentration | Overall GPA: 3.11

EXPERIENCE

Teacher's Assistant, Elizabethtown College   *part-time* Aug 2023-Present
(2-10 hours/week)
- Guided students through labs, circuit analysis, and project reports for classes 102, 201, and 202.
- Taught concepts relating to kinetics, energy, momentum, electricity, optics, waves, and magnetism.
- Introduced students to PASCO Capstone with a focus on utilizing graphs, data tables, and trendlines.

Undergraduate Researcher, Elizabethtown College   *full-time* May 2023 - Aug 2023
(40 hours/week)
- Applied state of the art deep learning object detection technologies to our research project.
- Presented and demonstrated our co-processor program at the annual Landmark Conference.
- Troubleshooted Linux based operating systems on an array of co-processors.

PROJECTS

Jay Radar, Elizabethtown College   May 2023 – Aug 2023
(40 hours/week)
- Tested and analyzed the accuracy of custom trained and pretrained AI models for object detection.
- Designed a co-processor agnostic vision program for the FIRST Robotics Competition.
- Profiled and refined python code for optimized resource consumption on constrained systems.

Plumbing Trainer, Elizabethtown High School   Jan 2023 - May 2023
(3-6 hours/week)
- Built a teaching aid used to introduce students to the trade of plumbing or household plumbing.
- Received an award for Recognition of Excellence and Professional Potential from Elizabethtown College.
- Became the source of inspiration for an article written by Watts Water Technologies in Contractors Magazine.

LEADERSHIP

Elizabethtown Robotics and Machine Intelligence Club President   May 2022 – Present
- Secured donations from local businesses to fund workshops, events and competitions.
- Organized workshops, events and competitions relating to the fields of robotics and machine intelligence.
- Aided students in individual projects and skill building including CAD, 3D printing, and programming.

ACTIVITIES

Elizabethtown Computer Science Club Member   Aug 2023 – Present
- Participated in multiple hackathons in teams of four people to create projects utilizing neural networks.
- Gained valuable experience in both backend and frontend websites made frameworks like React, Flask, and Taipy.

TECHNICAL SKILLS

- Programming: C, Python, Java, JavaScript, React
- GNU/Linux Systems
- MS Office Products
- Pi Vision
- Autodesk Inventor
- OnShape
- Solidworks
- 3D Printing
- Laser Cutting
- Plasma Cutting
- Soldering