Charles I. Pressey

SUMMARY

I am a driven aerospace engineering student with a strong foundation in advanced manufacturing and hands-on machining experience. Skilled in CNC operation, CAD/CAM, and engineering principles, with a passion for technology, automated manufacturing, and problem-solving. Experienced instructor and mentor, demonstrating leadership in martial arts and manufacturing. Certified in OSHA safety, lifeguarding, and wilderness emergency medicine. Seeking opportunities to apply technical skills in aerospace and manufacturing industries.

EDUCATION

Minuteman High School, Lexington, MA

Graduated May of 2024 | GPA: 4.3; SAT 1350 | Vocational Major | Advanced Manufacturing

Worcester Polytechnic Institute, Worcester, MA

Aerospace engineering, astronautical focus | class of 2028 | GPA:3.66

EXPERIENCE

Instructor, MacDonald Academy of Martial Arts, Watertown, MA

August 2020 - May 2024

Instructor of children's karate lessons, (Ages 5-15) Duties include: Leading warm-ups/works outs, teaching fundamentals of American Kenpo, advanced striking technique, and assisting head instructor.

Junior counselor, Camp Calumet Lutheran Ministries, Freedom NH

June 2023-August 2023

Duties included: Care for up to 8 campers, work in the boating department and other jobs as assigned; kitchen staff, family Camp lifeguard.

Apprentice, Razor Tool INC, Woburn MA

September 2023-November 2023

Duties included: Set up of Mazak HQR, insert changes, tool packaging and inspection, loading grinder pallets, carbide facing. Machine maintenance and cleaning.

Senior counselor, Camp Calumet Lutheran Ministries, Freedom NH

May 2024-August 2024

Duties included: Care for up to 8 campers, work in the boating department and other jobs as assigned.

Washburn shops Peer Lab Assistant, Worcester MA

November 2024-Present

Duties include: assisting with the instruction of the ME1800, manufacturing science, lab. CAM, and machine set-up of HAAS lathes and mills for use by students. Assist undergraduate and graduate students with manufacturing projects.

Skills

- Microsoft 365 suite including basic excel
- Basic SolidWorks (2024/2025)
- MasterCAM (2024 and up)
- Basic Fusion360 modeling and CAM
- High technical/computer ability

- HAAS 3-axis mill
- HAAS 2-axis lathe
- Limited manual mill and lathe experience
- Micrometer reading, analog and digital

CERTIFICATIONS & LICENSES

- OSHA 10-hour Construction Safety and Health (April/2021)
- Massachusetts Hot Works Safety Program
- American Red Cross Lifeguard/Waterfront skills/First aid/CPR/AED (August/2022)(re-upped May/2024)
- Massachusetts Driver's license (May/2023)
- WFR, Wilderness First Responder (May/2024)
- New Hampshire commercial boating license for vessels not over 34' (July/2024)

ACCOMPLISHMENTS & AWARDS

- Skills USA Milling Programmer Districts 1st place (2023)
- Skills USA Milling Programmer State competition 5th place (2023)
- Skills USA Automated Manufacturing Districts 1st place (2024)
- Skills USA Automated Manufacturing States competition 3rd place (2024)
- Black Belt American Kenpo Karate, MacDonalds Academy of Martial Arts (2024)
- President's Education Awards Program: Gold
- Minuteman High School Career Program Award, Advanced Manufacturing
- WPI Dean's List A/B (2024)