watsonadriana246@gmail.com
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Adriana L. Watson

SKILLS

Software: **Fabrication:**

CAD/CAM
- Autodesk AutoCAD
- Autodesk Inventor
- Autodesk Fusion360 (CAD and CAM)
- Catia V5
- Solidworks
- Mastercam
- Git

Programming
- Fanuc and Yamaha ROS
- MATLAB
- PLC, NC Programing
- PowerBI, Grafana, Tableau
- Unix/Linux Development
- C, C#, Python
- Azure, TensorFlow, MySQL, Docker

- Arc welding (GMAW, GTAW, and SMAW)
- Oxy-fuel welding and cutting
- CNC plasma arc cutting and waterjet cutting
- CNC Milling and Turning
- Rapid Prototyping
- Metal/Wood/Plastic Laser Cutting
- 3D Printing (PLA/ABS/Onyx)
- OSHA 30-Hour Certification

EXPERIENCE

Bechtel Innovation Design Center — *Supervisor*

August 2019 – May 2022

- Supervisor overseeing all hot works lab and high bay operations including equipment upkeep, inventory, staffing, and space regulations.
- Developed and directed a multi-level welding program to provide Purdue students and staff instruction and access to a variety of relevant welding processes.
- Assisted in the development and implementation of a virtual machining and welding experience in response to the COVID-19 pandemic.
- Taught welding, GD&T, CAD, and design skills to student members of the facility.
- **Projects:**
  - *Workshop Series*— Arranged and managed workshops for 5 separate labs in the Bechtel Center.
  - *Boilermakery*— Received funding for and built out a small internal makerspace to enable easier access to simple prototyping equipment.

Autodesk — *Fusion360 Ambassador*

December 2021 - Present

- Worked with fellow students teaching CAD and CAM skills.
- Worked with industry professionals to develop new CAD and CAM tools and processes.

United States Army Reserves — *Bridge Crewmember*

October 2020 - Present

- Gained leadership and collaborative work experience.
- Worked with a diverse team to solve real-world issues in a time-effective manner.
- Faced and overcame personal physical and mental challenges.

EDUCATION

Purdue University, West Lafayette — *Ph.D. Engineering Technology*

August 2024 – Present (Expected Graduation: Spring 2027)

- Primary Area of Study: Big Data and Machine Learning Analytics
- Graduate TA for ECET302 (Intro to Automation/PLC) and ECET374 (Intro to Networking and Linux)
- Graduate RA studying the use of AI and XAI for Industrial Root Cause Analysis and advanced data analytics

Purdue University, West Lafayette — *M.S. Engineering Technology*

May 2022 – August 2024

- Primary Area of Study: Synthetic Data Generation and Analysis
- Secondary Area of Study: Machine Learning, Big Data Visualization, and Data Analytics
- Graduate TA for ECET302 (Intro to Automation/PLC) and ECET374 (Intro to Networking and Linux)

Purdue University, West Lafayette — *B.S. Robotics Engr. Technology, Mechatronics, Electrical Engr. Technology (Minor)*

July 2019 - May 2022

- Graduated with distinction. Overall GPA: 3.85. Dean's list each semester.
- President and Founder of the Bechtel Center Innovators of Tomorrow
- TA for electronics and engineering courses (ECET227, ENGR103)