720-291-6056 · Pullman, WA · jakep730@gmail.com · Portfolio

### OBJECTIVE:

To gain practical laboratory and research experience while obtaining a physics education, then to pursue a career in experimental research

## EDUCATION:

Washington State University

Dec. 2024

• Physics, Bachelor's of Science - 3.4 Grade Point Average

Colorado State University

May 2010

• English Literature, Bachelor's of Arts - 3.5 Grade Point Average

## Work/Experience:

TECHNICAL ASSISTANT - FUNDAMENTAL QUANTUM PHYSICS LAB

Sept. 2022-Present

- Program timingtrigger control system for BEC experiments with sub-microsecond synchronization (Labview FPGA)
- Develop graphical interface for streaming/logging magnetometer data (Arduino)
- Laser profiling helper scripts using webcam (OpenCV, scikit-image)

TECHNICAL ASSISTANT - INSTITUTE OF SHOCK PHYSICS

Sept. 2022-July 2023

- Disassemble and precise detail clean impact guns between experiments
- Track and maintain inventory, assist daily lab operation

Freelance - Chiral Crafts LLC (self-employed)

Jan. 2021-Present

- Design/fabricate commissioned metalwork
- Knife and tool sharpening

Culinarian - Various

June 2009-March 2022

- Scratch cooking for various restaurants, from fast-casual to hotel and fine-dining, many chef/lead roles
- Honed efficiency, effective collaboration/communication, focus and attention to detail in the accelerated frame of commercial kitchens
- Wove mise en place through my soul

# Coursework/Academic Achievements:

- Electricity & Magnetism; Classical & Quantum Mechanics
- Electronics Lab; Quantum Lab; Optics; Astrophysics
- Differential Equations; Linear Algebra; Applied Numerical Methods
- Recipient Paul A. Bender Physics Scholarship & Physics Excellence Fund

#### SKILLS:

Solidworks

Python, C++

Tacos

Labview

Pasta

**Brevity**