Logan Wright

(858) 442-2481 | LOGANWRIGHTX@ICLOUD.COM | REXBURG, ID

EDUCATION

Bachelor of Science in Physics - Emphasis in Mathematics and Computer Science

Anticipated Apr 2025

Brigham Young University - Idaho Rexburg, ID

EXPERIENCE

Advanced Rocketry Team Founder, Team Lead, and Principal Engineer

Jan 2025 - Ongoing

Personal Engineering Team

Edge Autonomy, LLC

Rexburg, ID

San Luis Obispo, CA

- · Recruited, interviewed, organized, and directed a team consisting of several software engineers, electrical engineers, and mechanical engineers
- · Wrote an advanced flight simulation web app in Python to equip the team with HITL testing capabilities
- Wrote flight software including the PID control loop for thrust vectoring
- · Designed flight plans and scheduled launches with local airspace enforcement

Embedded Software Engineering Intern

Summer 2023 & Spring 2024

- · Built a flight-data analysis tool in Python, using Plotly and MySQL for software assert and failure investigations
- · Constructed a HITL schedule app to organize HITL wireless connections, prioritizing tasking in a hierarchical manner
- · Wrote automation scripts to auto-select presets on the HITL for integration tests for code releases
- Started an automated testing environment tool to streamline large-scale test cases on new hardware/software making use of custom API's in C++, Python, and Bash scripting language

Physics and Mathematics Tutor

Sept 2022 - Dec 2024

Brigham Young University - Idaho

Rexburg, ID

- · Taught Newton's laws of physics, Python programming, and electricity and magnetism principles to students
- · Transferred proficient understanding of multivariable/vector calculus, differential equations, and statistics to students

Physics lab Teacher's Assistant

Aug 2022 - Dec 2023

Brigham Young University - Idaho

Rexburg, ID

- Taught Arduino (software + hardware/sensor integration), experimental design, data collection, lab equipment safety/handling, and uncertainty propagation calculations
- Resolved computer issues with Python interpreters, file directories, C++ compilers, and library installations

PROJECTS

Advanced Model Rocket and Launch Pad

Nov 2022 - Ongoing

Personal Advanced Rocketry Team

Rexburg, ID

- · Building a motor-vectoring control system for a model rocket
- · Used/using Solidworks for parts design
- · Maintained and ran small-scale 3D printing operations for manufacturing
- Attracting people with unique and valuable skillsets to contribute
- Informed and led 4 others to make valuable contributions to the project, currently have 1 other team member

Rigid Body Simulator for Advanced Model Rockets (Python)

Jan 2025 - Ongoing

Personal Rocket Team

Rexburg, ID

- · Using physics, math, and software engineering background to develop an alternative to Simulink for modeling the above rocket controls problem
- · Learning foundational skills in geometric integration techniques like ones used in video game physics engines for solving quaternionic differential equations
- Decrypting Runge-Kutta 4th order and Crouch-Grossmann methods based on research papers and old textbooks to perform smooth rotations in 3D

PyTorch Supervised Learning Scripts and Outline

Oct 2024 - Nov 2024

Personal GitHub Project

Rexburg, ID

- · Learned setup and generalization of PyTorch models for basic supervised learning agents
- Built a command-line tool with Python to streamline the training and evaluation processes

SKILLS

Software

Python, C++, Bash, Arduino, LaTeX, Wolfram Mathematica, Javascript (NodeJs and ReactJs, Beginner To Moderate)

Solidworks (CAD) Associate Level Certification, Eagle Scout Award

Certifications

Critical Thinking, Intense Curiosity, Physics System Modeling (Computational), Motivated To Learn More, Written and Verbal Communication