JACKSON BUSCH

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EDUCATION

University of Washington, Seattle, WA **June 2024**

Master of Science in Physics

Relevant courses: Electromagnetic Theory | Radiation | Laser Physics | Electrodynamics

- **Dark Matter in CCDs (DAMIC): Development Assistant** **June 2023 – June 2024**
  - Built image analysis/masking script to identify signals in region of interest. Took digital images, investigated & corroborated data, and implemented tests for performance.
  - Analyzed data using ROOT framework and C++ in a Linux-like environment. Automated examination of multiple directories, each with over 200 FITS image files, extrapolated data, and generated plots.
  - Employed data manipulation and analysis techniques. Cleaned images and fit results to theoretical calculations. Researched CCD physics and delivered paper on findings.

University of California, Los Angeles (UCLA), Los Angeles, CA **June 2021**

Bachelor of Science in Aerospace Engineering

Relevant courses: Thermodynamics | Fluid Mechanics | Object-Oriented Programming | Design-Build-Fly

- **Unmanned Aerial Systems: Airframe Team Member** **December 2018 – June 2020**
  - Designed, modeled, and manufactured additions to a 5'-span quadrotor drone used in AUVSI SUAS Competition. Developed landing gear on $20 budgetary constraint.
  - Engineered components of 8'-wingspan, fixed-wing drone, with primary work on deployment module and ground vehicle. Reduced volumetric size of ground vehicle by over 20%.

Roosevelt High School, Seattle, WA – National Merit Scholar Finalist **June 2017**

EXPERIENCE

C2 Education, Bellevue, WA

Tutor/Teacher **September 2025 – Present**

- Delivered 1:1 and small-group instruction in high-level math (through IB and AP Calculus) and AP Physics, supporting 30+ students weekly.
- Broke down complex topics (e.g., multivariable derivatives, integration, kinematics, electromagnetism fundamentals) into concise, structured approaches based on problem-solving.

NASA, NASA HQ, Washington D.C. (Virtual/Remote)

Office of the Chief Engineer (OCE) Intern **September 2022 – December 2022**

- Led a comprehensive evaluation of NASA Gateway's Systems Security Engineering (SSE) practices; conducted interviews to evaluate strengths, gaps, and challenges and authored and delivered a report adopted as reference for future SSE initiatives.

Damar Aerosystems, Monroe, WA

Drafter Intern **June 2018 - September 2018**

- Renovated documentation system for 40+ tooling procedures using lathes, mills, band saws, belt sanders, etc. and took images used in documentation.

SKILLS

Technical: SolidWorks | MATLAB | C++ | ANSYS | Python | Linux Environment | Version Control (Git)

Interests: Soccer | Astronomy | Electric Guitar / Rock | Japanese Language