Jason Wu

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Education

Brown University   *Providence, RI*
Intended Sc.B. - Physics and Computer Science   *May 2027*
- Relevant Coursework: Operating Systems, Data Structures & Algorithms, Classical Mechanics, Experimental Physics, Electricity & Magnetism

Languages: Python, C, Java, Matlab
Tools: Git, Numpy, Pandas, Pytorch, Simulink
Systems: Shell, Linux, Multithreaded programming, Filesystems, Computer Architecture
Other: Familiarity with experimental physics tools, data analysis with Python notebooks

Research Experience

Nanoscale Physics and Quantum Devices Lab | Brown   *Oct. 2024-Present*
- Currently automating creation of materials database using large language models to parse research papers

DeepLense Intern | ML4Sci   *Sep. 2021-March 2023*
- Created and trained Resnet18 models with Pytorch to classify dark matter models
- Simulated datasets with Lenstronomy, Pyhalo, and PyAutoLens packages
- Worked closely with mentor to guide individual project direction and foster passion for computational physics
- Discussed progress in weekly team meetings, presented findings at school research symposium

Work Experience

Collection Management Student Worker   *Oct. 2024-Dec. 2024*
- Organized and maintained library materials using Library of Congress system to reshelve books
- Demonstrated strong attention to detail through checking inventory and shelf order

Math Teacher   *July 2024-Aug. 2024*
- Taught algebra, geometry, probability, test-taking strategies to students in 5th-9th grade, focusing on developing mathematical intuition and problem solving skills
- Developed customized lesson plans to address diverse learning needs
- Effectively communicated complex concepts in clear and interesting manner while maintaining patience with students, encouraging participation, and raising class spirit with humor

Other Experience

Brown Space Engineering   *Feb. 2024-Present*
- Colead of the testing and integration subteam, collaboratively assessed and implemented attitude determination algorithms in Simulink, facilitated integration with flight software subteam by translating code to C and the magnetorquer testing process

Brown/RISD Game Development   *Sep. 2024-Present*
- Pitched and designed the levels and player experience of a platformer game, coded key mechanics in C# using unity and optimized game performance

Eclipse Installation Project   *Oct. 2023-April 2024*
- Worked closely with team to design, budget, and build an eclipse demo with a large plaster Earth, moving moon with rails and a motor, and light stand with LED arrays
- Provided outreach to elementary school students in Providence by demonstrating the science of eclipses through our installation