

DHRUV SAINI

 dhruvs.vercel.app @ dhruv9saini@gmail.com


EXPERIENCE

A Sustainable Future

Founding Member, Head of Tech |  Oct 2023 - Present


- Built and scaled **PCM**, an AI-powered mobile app predicting paper use, to **30,000 students** nationwide in over 150 schools
- Trained symbolic regression model with **PySR** to predict paper consumption based on school demographics
- Leading **team of 20 to increase adoption** by developing nonprofit website and iterating on AI model, now helping save 1.7M sheets of paper per year
- Received **\$30k** in grants supporting sustainability impact and Gold Presidential Volunteer Service Award

University of West Virginia: SG-REAL Lab

GIS/Software Intern |  Jul 2025 - Present


- Created a 3D modeling pipeline for any power grid to simulate the effect of floods
- Finetuned SAM2 on human-labeled data to create a flood segmentation model to validate the simulations

Dimension

Software Engineer Intern |  Jun 2025 - Sept 2025

- Implemented webhooks to allow external companies to integrate with the enterprise collaboration platform
- Led process to allow Stripe, Vercel, Github, and many other hosted bots in channels
- Revamped and modernized UI, completing several refactors that culminated in a **70%** reduction of load time

Bond Intelligence

Software Engineer Intern |  May 2024 - July 2024


- Trained novel price intelligence model to predict Bitcoin token prices with newly released **Titan** architecture from **Deepmind**
- Revamped our kanban-style token management app with an **Express** backend and a **Tailwind / React** frontend, impacting 24,000 users per year

University of Washington

Quantum Technical Writing Intern |  Aug 2024 - Sept 2024

- Developed an **AI textbook editing workflow** with **Gemini 1.5** to analyze textbook versions and identify/annotate optimal edits
- Accelerated editing time by **250x**, cutting 120 hours of manual comparisons down to a 30 minute script run

Partify AI

Software Engineer Intern |  June 2023 - Sept 2023

- Reduced manual labor by 60x by creating an **AI web crawling agent** that extracts structured data to populate venue options in the event planner app
- Designed and implemented agent with **Python**, **Selenium** and **GPT-3.5** to automatically fetch relevant details for businesses in a given area

PROJECTS

Urban Heat Islands: A Geospatial Analysis | Jupyter, Pandas, Matplotlib, Pytorch

- Trained an ML model in **Pytorch** on satellite image samples to predict the most effective method for a city to reduce urban heat stress
- Created **Python** computer vision engine to detect small water bodies from satellite imagery and analyze effects of water infrastructure on heat stress
- Awarded 2nd place at the prestigious Washington State Science and Engineering Fair

MuseMistral | Python, Pytorch, Transformers

- Finetuned large language model **Mistral-7B** with 100,000+ pages of music data to generate music from a natural language description
- Used **Selenium** and **Python** with **BeautifulSoup** to automatically crawl and collect data, from which the model was trained with **QLoRA**

AWARDS AND HONORS

USACO

Gold Rank |  March 2024 - Present

ARC - The American Rocketry Challenge

National Finalists |  2025

- Captained a team of five to build a rocket that transports two eggs to 790 feet and brings them down safely within 41-44 seconds

EDUCATION

Bellevue High School

- 4.0 GPA, 36 ACT, President's Education Award
- 100+ hours of technical community service, including teaching a programming club at a local middle and high school
- 13 college-level courses, including AP Calculus, AP Computer Science, AP Physics C