# Weizhi Du

314-203-6582 | d.weizhi@wustl.edu | linkedin.com/in/duw | weizhi-du.github.io

#### EDUCATION

## Washington University in St. Louis

GPA: NA/4.00

B.S. Computer Science (expected)

May 2027

- Key Courses: Data Structures & Algorithms, Probability & Statistics, Higher Math, Calculus III, Intro CE
- Honors & Awards:
  - Howard Nemerov Scholarship, 2023-2027 (award to 10 outstanding writers per year)

#### The Athenian School

GPA: 4.50/4.00

High School Diploma

June 2023

- Key Courses: CS Structure & Interpretation (UC Berkeley), Algorithm, Data Structure, Applied AI, AP CS A
- Honors & Awards:
  - S.-T. Yau High School Science Awards, 2022 (Global Finalist & Regional 1st Prize)
  - Mathematical Contest in Modeling (MCM), Honorable Mention, 2021
  - Physics Unlimited Premier Competition, Honorable Mention, 2023 (11th place in North America)
  - Speaker of the Convocation, 2022-23

#### EXPERIENCE

# Research Assistant - Image Super-Resolution

June 2021 – December 2022

Ithaca, NY

Cornell Engineering

- Developed Transformer and Generative Adversarial Networks (T-GAN) based super-resolution reconstruction networks to restore low-resolution medical images acquired with minimal radiation dose.
- Experimented on MRI and CT images of knees and bellies and discovered that T-GAN achieved optimal performance compared with traditional models (authored paper published in Tsinghua Science and Technology).

## Research Assistant - Coalition Control Model

January 2020 – January 2021

Shanxi University

Shanxi, China

- Designed and programmed a Coalition Control Model (CCM) based on the Model Predictive Control (MPC) method and tested the validity of CCM on a realistic industrial fishing scenario.
- Authored a paper that demonstrated that CCM could dynamically distribute limited resources in complex scenarios and that CCM could be extended to other problems (The result won global finalist of Yau Awards with a selection rate of 1%).

# Math Teaching Assistant

August 2021 - June 2023

The Athenian School - Applied Calculus, AP Calculus AB, AP Calculus BC

Danville, CA

- Hosted weekly office hours to support students from all calculus classes through individual and group tutoring.
- Graded assignments with narrative feedback; met with students to improve their understanding of the material.

## Leadership & Service

#### Founder & Programming Teacher

November 2019 – Present

Dino Coding Group

Shanxi, China

- Spearheaded the non-profit to promote programming education in rural areas in Shanxi Province, China.
- Taught Scratch and Python to 143 students for 100+ hours in partnership with overseas researchers.
- Presented at Shanxi Juvenile Education and Harvard ScratchEd conferences on programming education.

### Prefect & Student Mentor

May 2022 - Present

The Athenian School

Danville, CA

- Supervised and advised 60 boarding students and new international students as an active leader.
- Organized weekly meetings and bonding events, enforced residential policies, and maintained students' well-being.
- Mentored students by hosting monthly sessions on academics, community engagement, and inclusion awareness.

## SKILLS

Technical Skills: Python, Java, MATLAB, R, NumPy, Pandas, Matplotlib, TensorFlow, Git, LaTeX

Spoken Languages: English (fluent), Chinese Mandarin (fluent), Japanese (limited)

Activities: Howard Nemerov Scholars Program; Financial Operation in Washington University China Business

Association; Counsel Representative of LeeBeau Residential College; HackWashU hackathon participation