Benjamin Li

● 25benjaminli@gmail.com ● benjaminli.net
● LinkedIn ● GitHub ● Medium ● Google Scholar

EDUCATION

Cornell University, B.A. Computer Science 2025-2029

Relevant Coursework (Fall 2025): MATH 2210 (Linear Algebra), CS 2110 (OOP & Data Structures), COGST 2801 (Game Theory), STS 2810 (Science, Nature, and Knowledge)

SAT: 1560/1600; **PSAT**: 1510/1520 (National Merit Finalist)

High School GPA: 4.67/4.00 (top 5%)

EXPERIENCE

Student Researcher (AI, Computer Vision, Bioinformatics) 2022-Present

- Research on detecting toxin-producing cyanobacteria, segmenting brain tumors, and predicting human-infecting, viral zoonoses based on genomic sequences. Focus on few-shot learning, approaches with limited computing resources and data quality
- Joined the **Cornell Computational Imaging Lab** in the fall of 2025, working on uncertainty quantification for imaging tasks

Intern, Regeneron (on-site) Summer 2025

- Built open-source quantum optimization code for protein–ligand docking with implications for more rapid drug development
- Presented and discussed work with multiple internal Regeneron + IBM research team members under the mentorship of the Chief Data Officer of the Regeneron Genetics Center

President of **Millburn High School Computer Science Integration Initiative (CSII) Club** 2022-2025

- Developed & maintained a kiosk sign-in security app serving 1600 students, taught web dev/AI curriculum, launched a guest speaker series featuring scholars in AI & ethics, medical imaging, and robotics
- **Founding editor-in-chief for "Catalyst" CS & engineering magazine**

Software Engineer, Jersey Cares + New Jersey Academy of Sciences 2022-2025

- Co-lead developer for a prototype volunteer outreach app to serve Jersey Cares' 20,000 volunteers statewide
- Built a judging program for the New Jersey Academy of Sciences (NJAS)'s research symposium, serving 200+ students and 80 judges

Founder & Core Backend Developer, Inventurn 2022-2024

- Designed APIs, database logic, learned to build web3, blockchain-embedded tools for nonprofits and businesses
- Developed detailed workflows and journals to keep team members on track and accountable

HONORS

Regeneron Science Talent Search Top 40 Finalist 2025

- The "oldest and most prestigious" science competition in the United States, with nearly 2,500 applicants who are evaluated based on "the originality and creativity of their scientific research, as well as their achievement and leadership"
- Awarded $25,000 for research on building an algorithm to detect brain tumors with low-quality MRI scans from sub-Saharan Africa

NJ Representative, American Junior Academy of Science (AJAS) 2025

- Research: "FS-MSA: A Few-Shot, Self-Prompting 3D Medical Image Segmentation Algorithm"
- Presented at the AJAS National Annual Conference after placing 1st in Math and Computer Science at the NJAS regional fair

NJ Representative, National Junior Science and Humanities Symposium (JSHS), U.S. Department of Defense 2023

- Research: "A Novel Stacked Ensemble Machine Learning (SEML) Model for Predicting Viral Zoonoses"
- Selected after placing 2nd in the poster presentation across all categories at the regional JSHS fair

IEEE Annual Ubiquitous Computing, Electronics & Mobile Communication Conference @ Columbia University 2023

- Research: "Identification of Cyanobacteria for Harmful Algal Blooms Research Using the YOLO Framework"
- Best Paper Award, Best Presenter Award: Artificial Intelligence/Machine Learning

New York Times STEM Writing Contest 2023

- Honorable Mention (top 1% among over 3000 worldwide submissions) for article "Black Box Algorithms: Exploring One of the Most Misunderstood Technologies"

Terra North Jersey Science Fair (TNJSF, ISEF-affiliated) 2023-2024

- 2023: 2nd place Bioinformatics, Association for Computing Machinery Award
- 2024: 2nd place Computational Neuroscience, Karen Kranz Independent Researcher Award

Naval Horizons STEM Essay Contest, U.S. Navy 2022

- Highest Honors winner for essay on the ethics and future of artificial intelligence in the military

Presidential Volunteer Service Award (Gold) 2022

American Computer Science League (ACSL) Intermediate Division Finalist 2022

VEX VRC Robotics World Championship Qualifier 2022

CONFERENCES/JOURNALS

Li, B., Ding, K, Dera, D. (2025). MD-SA2: optimizing Segment Anything 2 for multimodal, depth-aware brain tumor segmentation in sub-Saharan populations. J. Med. Imag. 12(2). https://doi.org/10.1117/1.JMI.12.2.024007

Li, B., Serrano, K., Mazzaro, M., Wu, M., Wang, W., & Zhu, M. (2023). Identification of Cyanobacteria for Harmful Algal Blooms Research Using the YOLO Framework. IEEE Annual Ubiquitous Computing, Electronics & Mobile Communication Conference (UEMCON). https://doi.org/10.1109/uemcon59035.2023.10316078

Li, B. (2023). A Novel Stacked Ensemble Machine Learning Model for Predicting Viral Zoonoses. (Poster accepted, not presented due to insufficient funds) Association for Computing Machinery (ACM) 2023 Annual Conference on Bioinformatics, Computational Biology, and Health Informatics (ACM-BCB).

HOBBIES

I enjoy writing articles on Medium.com (https://medium.com/@25benjaminli). Topics include computer vision guides, tips on approaching medical image segmentation, idea generation, and AI ethics.

I also like running (high school varsity track & field athlete), hiking, rock climbing, and learning geography!

- Ranked #80 in the USA in the competitive GeoGuessr game (May 2025), no-move mode - 65 million registered players worldwide

SKILLS

Python • Java • JavaScript/Typescript • C/C++ • Data analysis/visualization (Pandas, NumPy, Matplotlib, Plotly) • Machine/deep learning (PyTorch, scikit-learn) • Imaging and Computer Vision (OpenCV, YOLO, MONAI) • Web/App Dev (React/Next.js, Flutter, Flask, Firebase)