

# Benjamin Li

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## EDUCATION

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### Cornell University, B.A. Computer Science

Expected 2025 – 2028

**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%), **College GPA:** N/A (first semester)

## EXPERIENCE

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### Student Researcher, Cornell Computational Imaging Lab

Oct 2025 – Present

- Working on uncertainty quantification approaches for inverse imaging problems
- Implemented machine learning models utilizing conformal prediction, bayesian neural networks, variational inference

### Quantum Computing Intern, Regeneron Pharmaceuticals (on-site)

Jun 2025 – Aug 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, advised by the Chief Data Officer of the Regeneron Genetics Center

### Software Engineer, New Jersey Academy of Sciences

Mar 2025 – May 2025

- Designed and operated a science fair judging program for the New Jersey Academy of Sciences (NJAS)'s research symposium, serving ~200 students and ~80 judges, significantly reducing processing time and room for error compared to manual verification

### Student Researcher, Millburn High School

Jun 2022 – May 2025

- Focused on building AI/ML systems for few-shot circumstances, limited computing resources and data quality
- Included detecting toxin-producing cyanobacteria, segmenting brain tumors, and predicting human-infecting, viral zoonoses based on genomic sequences

### President, Millburn High School Computer Science Integration Initiative (CSII) Club

Jun 2022 – Jun 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

### Founder & Core Backend Developer, Inventurn

May 2022 – Nov 2024

- Company that builds applications for businesses and nonprofits, e.g. outreach app to serve thousands of volunteers in New Jersey
- Personally focused on APIs and database logic, also gained experience with web3, blockchain infrastructure

## HONORS

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### 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 1<sup>st</sup> in Math and Computer Science at New Jersey 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 2<sup>nd</sup> 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

### 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

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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 love learning about and exploring the world – I'm a regular hiker, rock climber, and geography enthusiast!

## SKILLS

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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)