Benjamin Li

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Mobile: 973-757-4350

EDUCATION

Cornell University, B.A. Computer Science Expected 2025 – 2028

Relevant Coursework: Linear Algebra, Object-Oriented Programming & Data Structures, Game Theory

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

GPA: 4.00

EXPERIENCE

Student Researcher, Cornell Computational Imaging Lab Oct 2025 – Present

- Developing uncertainty quantification approaches for inverse imaging problems
- Worked with machine learning models using conformal prediction frameworks and 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

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 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 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

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

SKILLS

Python • Java • JavaScript/Typescript • C/C++ • Data analysis (Pandas, NumPy, Matplotlib) • Machine learning (PyTorch, scikit-learn) • Computer vision (OpenCV, scikit-image, Torchvision) • Web/App dev (React/Next.js, Flutter, Flask, Firebase) • Version control (Git, GitHub) • Academic writing (LaTeX)