Benjamin Li

https://benjaminli.net

Email: 25benjaminli@gmail.com
Mobile: +1-973-757-4350

Education

- **Cornell University** — Ithaca, NY
  B.A. in Computer Science; GPA: 4.00 — *Expected Dec 2028*

Experience

- **Cornell Computational Imaging Lab** — Ithaca, NY
  Undergraduate Researcher — *Oct 2025 – Present*
  - Developing uncertainty quantification approaches for inverse imaging problems
  - Worked with machine learning models using conformal prediction frameworks and variational inference
  - Contributed to new uncertainty bound calibration method (under review ICLR 2026), independent research project in Spring 2026
- **Regeneron Pharmaceuticals** — Tarrytown, NY
  Quantum Computing Intern — *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
- **New Jersey Academy of Sciences** — Remote
  Software Engineer — *Mar 2025 – May 2025*
  - Designed and operated a science fair judging program for the New Jersey Academy of Sciences (NJAS)'s research symposium
  - Served approximately 200 students and 80 judges, significantly reducing processing time and error compared to manual verification
- **Millburn High School** — Remote
  Independent Student Researcher — *Jun 2022 – Jun 2025*
  - Focused on building AI/ML systems for few-shot circumstances, limited computing resources and data quality
  - E.g. predicting human-infecting viruses with genomic sequences, detecting toxin-producing cyanobacteria, segmenting brain tumors
- **Inventurn** — Remote
  Founder & Core Backend Developer — *May 2022 – Nov 2024*
  - Company that builds applications for businesses and nonprofits, e.g. outreach app to serve thousands of volunteers in NJ
  - 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. Awarded $25,000 for brain tumor detection research with low-quality MRI scans.
- **1st place Math & CS, NJ Academy of Sciences Symposium** (2024): Around 200 students across all categories. Placed first in Math & CS, then represented NJ at national symposium.
- **Karen Kranz Independent Researcher Award** (2024): One of two students awarded at Terra North Jersey Science Fair out of 150+ participants.
- **IEEE UEMCON Best Paper, AI/ML** (2023): Recognized for research on toxin-producing algal bloom detection.
- **Highest Honors, Naval Horizons Essay Contest (U.S. Navy)** (2022): For essay on the ethics and future of AI in military.
- **Presidential Volunteer Service Award (Gold)** (2022): Received for leading cleanup efforts at Liberty State Park, creating apps for volunteer organizations, and teaching Python.
- **VEX VRC Robotics World Championship Qualifier** (2022): Programmer for team 7405M, worked on driver-controlled and autonomous routine using C/C++. Experience with PID controller, odometry.

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

- **Languages**: Python, Java, Javascript, C/C++, SQL, LaTeX
- **Libraries**: PyTorch, scikit-learn, NumPy, Pandas, Matplotlib, OpenCV, Qiskit
- **Systems and Developer Tools**: Linux/Unix, Windows, Git