

Amogh Jambekar

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EDUCATION

Northeastern University

Bachelor of Science in Computer Engineering

- Incoming Fall 2025

Expected May 2029

Boston, MA

Bridgewater-Raritan High School

High School Diploma (4.417/4.0 GPA)

- SAT: 1510/1600
- Relevant Coursework: Data Structures and Algorithms (CS112), AP CSP/CSA, AP Physics 1, AP Physics C (E&M + Mech.)
- Notable Activities: Quantum Computing Club (President, Founder), BREngineering (President)

June 2025

Bridgewater, NJ

SKILLS

Languages: Python, Java, TypeScript, C++, JavaScript, HTML/CSS, Qiskit, Q#, Cirq

Frameworks: Astro, TailwindCSS, Tkinter, PyTorch, MDX

Developer Tools: Jupyter Notebooks, Numpy, Pandas, Matplotlib, PostCSS, Autoprefixer, Zod

EXPERIENCE

BestParents.com

AI Engineering Intern

Summer 2025

San Francisco Bay Area

- Reengineered legacy essay system and designed a UX-friendly wizard, enabling ESL students in low-income areas to independently input ideas in any language and generate structured, high-quality essays;
- Developed a structured scoring system **trained with 250+ prompts**, providing actionable feedback and practical grades to guide student improvements;
- Scaled platform for **5,000 students across 10 countries**, optimizing for low-bandwidth access and ensuring end-to-end accessibility.

Holonym Foundation

Mobile App Development Intern

Summer 2024

Washington, D.C.

- Engineered a Swift-based iOS app using local passport scanning and parsing to enable users to generate zero-knowledge proofs (ZKPs) for private identity verification;
- Developed **15+ unit and integration tests** using XCTest and conducted security audits to ensure cryptographic integrity and compliance with App Store guidelines;
- Contributed to deployment automation using CI/CD tools, facilitating a smooth App Store launch and achieving **3,000+ secure downloads** implemented alongside internal ticketing platform for errors.

Princeton University

Quantum Machine Learning Researcher

June 2022 – August 2024

Princeton, NJ

- Designed a Quantum Machine Learning algorithm to predict air pollution in New Delhi, correlating air quality, weather, season, location, source, time/date, holidays, fire count, pollutants, wind direction, and humidity;
- Implemented Quantum Natural Gradient extensions to explore multiple solution spaces simultaneously, reduce computational cost, and improve model accuracy;
- Led implementation of findings with NCT, Indian Ministry of Environment, and **15+ major cities across India and the US**, resulting in legislation towards traffic regulation and neighborhood AQI alerts, **impacting 5M+ residents**.

PROJECTS

Personal Website | Astro, TailwindCSS, TypeScript, MDX

May 2025

- Developed a full-stack portfolio website with a dynamic main page featuring experience, projects and education, validated blog with tag filtering, and a password-protected photos section unified by an intuitive navbar;
- Implemented content validation handling 10+ blog posts, tag-based filtering **reducing search time by 40%** and **storing 80+ photos**.

Quick | Swift

April 2025

- Built a lightweight post-it note app with an editable floating timer, **used by 200+ testers and optimized for minimal resource use** ahead of App Store launch.