

# Riddhi Bhagwat

+1 847-310-0073 | [riddhib@mit.edu](mailto:riddhib@mit.edu) | [linkedin.com/in/riddhibhagwat](https://www.linkedin.com/in/riddhibhagwat)

## Education

**Massachusetts Institute of Technology**, Cambridge, MA

May 2027

Bachelor of Science in Computer Science & Engineering, (Minor: Brain and Cognitive Sciences)

**Relevant Coursework:** Intro to Machine Learning (6.390/6.036), Graduate Machine Learning (6.790), Intro to Algorithms (6.121/6.006), Computation Structures (6.191/6.004), Low Level Programming (6.190/6.0004), Probability & Random Variables (18.600), Computational Cognitive Science (6.412), Discrete Mathematics (6.120), Fundamentals of Programming (6.101/6.009); **Significant Programming Skills**

**Adlai E. Stevenson High School**, Lincolnshire, IL

May 2023

## Work Experience

**Dana Farber Cancer Institute & MIT CS AI Laboratories (CSAIL)**, Boston, MA

June 2024 – Present

Researcher

- Generalized the *OncoNPC* classification algorithm to a broader patient population by training on specific gene sequencing platforms.
- Identified approaches for retraining the developed algorithm to maximize performance & calibrated predictor confidence scores.

**Juanes Research Group, MIT CEE Dept. & MIT Energy Initiative**, Cambridge, MA

June 2024 – Present

Research Intern

- Trained, tested, debugged & validated deep neural network-based surrogate model (*FracNet*) to model fractured rock networks & combat limitations of existing models with datasets generated using DFN & a MATLAB-based algorithm developed by the lab.
- Simulated 2D fractured rock networks using *Discrete Fracture Network* (DFN) & investigate distribution of pressure & flow rates.

**Bear Lab, Picower Institute for Learning and Memory (at MIT)**, Cambridge, MA

November 2023 – Present

Undergraduate Researcher

- Implement coding protocols to generate visual stimuli, facilitating analysis of neural activity in V1 of mouse brain.
- Employed data optimization strategies to improve the efficiency of imaging data processing for research purposes.
- Built a machine learning-based classifier model to analyze time-series data to extract insights into memory processes.

**Baxter International**, Deerfield, IL

June 2022 - August 2022

Advanced Microsurgery Research Intern

- Researched tech & developed tech landscaping for next gen. sensor used as microsurgical equipment in postoperative treatment.
- Assessed the feasibility of incorporating wireless features, AI/machine learning algorithms, and non-invasive vital sign monitoring.
- Explored the use of nanotechnology and ultrasonic monitoring to elevate patient outcomes in clinical settings.

**University of Illinois at Chicago (UIC)**, Chicago, IL

July 2021 - October 2021

Summer Research Intern

- Simulated human anatomical interactions in various environments to understand muscle structures to advise surgical equipment.
- Proposed research-based simulation models for understanding human computer interaction within surgical settings.

**Code Ninjas**, Long Grove, IL

May 2022 - August 2023

Code Sensei (Coding Instructor)

- Guided students aged 5-14 in adaptive learning setting to develop skills in Scratch, JavaScript, C#, & Unity through modules.

## Activities

**MIT Society of Women Engineers (SWE)**, Technology Chair

October 2023 – Present

- Built MIT SWE website using a variety of web development frameworks and integrating both frontend and backend.
- Initiated workshops to equip general members with a stronger skillset to take on roles in the technology industry.

**AIM (AI @ MIT) Labs**, Labs Cohort Member

September 2023 – December 2024

- Selected as a freshman for 2023 fall cohort of MIT's premier AI project incubator to innovate an AI/ML focused solution
- Collaborated with team to create Mandarin speech tone corrector using transformer model & full stack dev.; present at Demo Day

**GirlCon Technology Conference**, Board of Advisors

June 2023 - Present

- Organized largest intl. tech conference for women & nonbinary individuals & established segment showcasing student projects
- Spearheaded chapter-development system in global areas & liaison for Sponsorships National Team & managed corporate sponsors

## Awards & Accomplishments

LinkedIn Top Computer Science Voice | Diversity in Tech Awards – Young Female STEM Pioneer Finalist | 2x Top 20 Intl. Finalist - HOSA Medical Innovation | NCWIT AspireIT Impact Award | 2x USABO National Semifinalist | 3x NCWIT AiC National Honorable Mention

## Skills & Interests

**Technical:** Python | PyTorch | Java | Swift | Data Analysis | C# | C/C++ | MATLAB | JavaScript | CSS | HTML | Assembly | iOS Dev. | SQL

**Soft Skills:** Adaptive Learning | Excellent Communication Skills | Work Ethic | Creativity | Leadership | Problem Solving

**Interests:** Badminton | Viola | Reading | Music | Learning languages