

Riddhi Bhagwat

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

Education

Massachusetts Institute of Technology, Cambridge, MA

May 2027

Candidate for Bachelor of Science in Computer Science & Engineering

Relevant Coursework: Deep Learning, Intro to Algorithms, Computation Structures, Software Construction, Computer Systems Engineering, Intro to Machine Learning, Low Level Programming, Probability & Random Variables, Fundamentals of Programming, Discrete Mathematics

Skills

Technical: Python | PyTorch | TensorFlow | AI/ML | NLP | Java | iOS App Dev. (Swift) | Data Analysis | Git | C/C++ | MATLAB | JavaScript (React.js, Next.js, Node.js) | CSS | HTML | Full Stack Web Dev. | REST API | SQL | Assembly Language |

Work Experience

MIT CSAIL – Language and Intelligence Group, Cambridge, MA

September 2024 – Present

Machine Learning Researcher (NLP)

- Developing a platform to collect and integrate human feedback into a continuous learning loop for large language models (LLMs).
- Designing and implementing automated training pipelines to enhance model responsiveness based on real-time user input.
- Collaborating through partnership with HuggingFace to deploy and test the platform in real-world scenarios.

MIT CEE Dept. & MIT Energy Initiative, Cambridge, MA

June 2024 – Present

Computational Research Intern

- Training, testing, & validating 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.
- Presenting pitch & poster at MIT Energy Initiative's Annual Research Conference, highlighting notable research in energy sector.

Dana Farber Cancer Institute, Boston, MA

June 2024 – September 2024

Machine Learning Summer Researcher

- Generalized the *OncoNPC* classification algorithm to a broader patient population by retraining and deploying on cloud with GCP.
- Identified approaches for optimizing training pipeline to maximize performance & calibrated predictor confidence scores.

Picower Institute for Learning and Memory (MIT), Cambridge, MA

November 2023 – June 2024

Undergraduate Researcher

- Implemented 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 Technologies Intern

- Researched tech & developed tech landscaping for next gen. sensor used as microsurgical equipment in postoperative treatment.
- Assessed the feasibility of nanotech, AI/ML algorithms, non-invasive monitoring, & ultrasound to elevate patient outcomes in clinic.

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.

Leadership & Volunteering

AIM (AI @ MIT), Executive Team Member - Permeate Director

September 2023 – Present

- Establishing newest initiative (Permeate) for AI projects targeted towards social good through collaborations with nonprofits.
- Developed Mandarin speech tone corrector using transformer model & deployed with full stack (Flask, Next.js, tailwind CSS).
- Selected as a freshman for MIT's premier AI project incubator; collaborated with team to create project and present at Demo Day.

MIT Society of Women Engineers (SWE), Technology Chair

October 2023 – Present

- Building MIT SWE website using web dev. frameworks and integrating both frontend and backend through tailwind, react.js, etc.
- Initiated workshops to equip general members with a stronger skillset to take on roles in the technology industry.

GirlCon International Technology Conference (www.girlcon.org), Board of Directors

June 2023 - Present

- Organized largest intl. tech conference aimed at exposing women & nonbinary students to opportunities in 'Tech + X' industries.
- 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