Ashar Farooq

Huntington Station, NY 11746

Education

Massachusetts Institute of Technology

June 2025

Master of Engineering in Electrical Engineering and Computer Science

Cambridge, MA

• Computer Systems and Society, Artificial Intelligence and Decision-Making, Data Traceability

Massachusetts Institute of Technology

June 2023

Bachelor of Science in Computer Science and Engineering

Cambridge, MA

• Computation Structures, Software Construction, Machine Learning, Design of Algorithms, Python, Project Engineering

Experience

SantAI

September 2025 – Present

Member of Technical Staff

New York, NY

- Developed and optimized advanced Retrieval-Augmented Generation (RAG) pipelines for custom LLM agents, achieving a 2× improvement in response speed and retrieval accuracy.
- Designed and built a scalable MCP Directory platform hosting hundreds of MCP servers, integrating external and internal environments with support for forums, automated deployments, and live scripting.

Dispel

February 2024 - December 2024

Associate Full-Stack/Infrastructure Software Engineer

New York, NY / Remote

- Pioneered features related to the core Dispel remote access platform and backend cloud infrastructure, including logic updates for job queue requests to handle tens of thousands of updates in a divide-and-conquer approach.
- Closed more than 95 tickets to fix existing and new bugs in the product architecture of Dispel, helping Web & API, Quality Assurance (QA), Infrastructure, and DevOps teams with regression testing and integrations.

Flowcode

June 2022 - August 2022

Software Engineering Intern

New York, NY / Hybrid

- Steered the Activation Engineering Team in developing a revolutionary variant for a flagship product, resulting in a remarkable twofold increase in the conversion rate for college students engaging with Flowcode QR codes.
- Architected a cutting-edge feature enabling the dynamic showcase of the nearest print stores on a customizable map during the checkout phase of a Flowcode QR code, elevating customer convenience.

Skills

Programming Languages: Python, JavaScript, TypeScript, HTML, CSS, SQL, C++, Java, Stata

Frameworks & Libraries: React, Next.js, Vue, Django, FastAPI, Node.js, Express, Tailwind CSS, Flask, Material UI

 ${\bf Databases:}\ {\bf Postgre SQL},\ {\bf Mongo DB},\ {\bf SQLite},\ {\bf Chroma DB},\ {\bf Firebase}$

Cloud & DevOps: AWS, Azure, GCP, Docker, Heroku, Vercel, Ansible, NX Cloud, Coveralls, LaunchDarkly

Tools & Practices: Git, GitHub, GitLab, Jest/Mocha, Sentry, RabbitMQ, VS Code, Virtual Desktops, Cursor, Postman

Projects

${\bf QuickChat} \ | \ {\it TypeScript, \ Vue, \ Heroku}$

November 2022 - December 2022

• Engineered an innovative chatting platform that revolutionizes user experience, offering hassle-free setup with no sign-in or sign-up requirements. Designed for swift deployment of temporary, time-constrained chatrooms over the web.

CloudDude | React, MongoDB, Node

January 2022

• Conceptualized and brought to life a user-centric game allowing creation, publication, and play of custom levels, challenging players with dynamic obstacles and game objects.

Extracurricular

Teaching Assistant

Spring 2021 – Spring 2025

MIT's Introductory Python Courses 6.100A, 6.100B, and 6.100L

• Mentored students in tackling advanced problem sets on programming fundamentals, including dynamic programming and recursion, while concurrently leading impactful office hours, writing problem sets, and teaching recitation sections.