Keeyon Hajjafar

United States citizen authorized to work without restrictions. Hajjafar.k@northeastern.edu — (330)-634-4544 — Boston, MA — LinkedIn — Portfolio

Education

Northeastern University - Khoury College, Boston, MA

Sep 2023 – Dec 2025

MS in Computer Science, GPA: 3.9 / 4.0

Coursework: Foundations of AI, Discrete Structures & Systems, Database Management, Object-Oriented Design, Algorithms

Case Western Reserve University - College of Engineering, Cleveland, OH

Aug 2017 - May 2021

BS in Mechanical Engineering

Coursework: Introduction to Java, Statistics and using R, Computers in Mechanical Engineering, Controls Engineering

Technical Knowledge & Skills

Languages (Proficient): Python, Java, C, MATLAB, R, HTML, SQL, XML, CSS, JavaScript

Tools: Git, GitHub, OpenCV, PyTorch, NumPy, React, MySQL, JUnit, AprilTag, UML Design, ERD (Crow's Foot), LaTeX **Engineering:** Certified SolidWorks Professional (CSWP), Lab Management Systems (LIMS), CAD and Vector Software

Projects – Click here for more details and projects!

Clinical Trial Chatbot - User-friendly analysis tool

Nov 2024 - Present

- Designed a Python backend to provide analysis on clinical trial data from natural language.
- Implemented tools such as Clinical Trials API and AI to create a pipeline for querying data and presenting results.
- End goal is to develop an intuitive tool for accessing and understanding clinical trial histories.

News Crossword Puzzle - Weekly generated crossword puzzle from news headlines

Sep 2024 – Present

- Used JavaScript to design a flow to retrieve keywords and hints from top headlines using The News API and Gemini.
- Developed an algorithm to generate the crossword puzzle from collected keywords for play.
- Implemented React for the frontend, Node.js and MongoDB for the backend, with deployment planned on AWS.

Stock Market Predictor – Multi-model single-stock predictor in Python

Feb 2024 – May 2024

- Achieved trend predictions with 44% accuracy using Markov Modeling and Reinforcement Learning.
- Trained models with data from Google Trends and Alpha Vantage API to enhance transfer learning.

Sales Transaction Database - Star Schema

July 2024

- Designed MySQL and SQLite databases to analyze purchase data and representative sales.
- Processed over 25,000 data points from XML and CSV files for database input.

Experience

CodeAdvantage — Boston, MA

Aug 2024 - Present

Instructor

• Teach coding and robotics programs to children aged 7-13, fostering problem-solving skills.

Northeastern University — Boston, MA

May 2024 – Present

Research Assistant at Transformative Robotics Lab

- Research path planning and positioning in robots using machine learning with Python, motion capture, and MATLAB.
- Utilize AprilTags, OpenCV, and motion capture systems to improve positional accuracy by 97.5%.

Northeastern University — Boston, MA

Jan 2024 - Present

Teaching Assistant for CS 5004 (Object-Oriented Design)

- Provide supplementary material and teach recitations on Object-Oriented Programming concepts in Java.
- Manage grading, office hours, and one-on-one tutoring for classes of up to 160 students.

Stevanato Group — Boston, MA

Oct 2022 – Sep 2023

DDS/DCS Mechanical Scientist

- Conducted experiments on drug delivery systems and coordinated with clients for effective planning.
- Migrated lab database to LIMS, reducing qualification time by 80% and ensuring ISO compliance.