

Narayan Sharma

708-402-0797 | sharma.na@northeastern.edu | [linkedin.com/in/ns324/](https://www.linkedin.com/in/ns324/) | github.com/narayansharma-21

EDUCATION

Northeastern University

Boston, MA

Bachelor of Science in Data Science (GPA: 3.8)

Aug. 2021 – May 2025

Relevant Coursework *Object-Oriented Design, Algorithms & Data Structures, Discrete Structures, Foundations of Data Science, Database Design, Large Scale Information Retrieval, Information Data Visualization, Linear Algebra, Probability & Statistics, Natural Language Processing, Web Development*

TECHNICAL SKILLS

Languages: Java, Python, GoLang, Racket, GraphQL, TypeScript, Smithy

Databases: MySQL, Redis, MongoDB, Neo4j, AWS DynamoDB

Frameworks/Libraries: Flask, JUnit, Gin, gqlgen, REST, AWS, OpenCV

EXPERIENCE

Software Development Engineer Co-op

Aug. 2023 – Dec. 2023

Amazon Robotics

Boston, MA

- Accomplished migration of 6 problem finders from legacy services to a centralized system utilizing AWS Lambda, DynamoDB, and Athena, enhancing global monitoring across fulfillment centers
- Implemented DynamoDB-based scheduling for AWS SNS topics, ensuring scalable distribution and dynamic problem finder scaling for timely information to subscribers
- Developed a PATCH endpoint via API Gateway, facilitating the addition of update functionality to internal service's notifications
- Orchestrated a State Machine with AWS Step Functions and Lambdas to handle diverse notification types and internal service dependencies, ensuring subscribers receive up-to-date information through dynamically updated notifications

Software Engineer Intern

June 2023 – Aug. 2023

MyDataProduct

Remote

- Responsible for testing and optimizing mobile platform applications and maintaining development operations through automated shell scripts in the pipeline, while collaborating with cross-functional teams throughout the development Agile lifecycle
- Developed data product web applications utilizing Flask and other Python-centric frameworks/packages, leading to a 20% improvement in application response time and a 15% increase in user engagement

Full Stack Software Engineer

Jan. 2023 – May 2023

Generate (ReMo)

Boston, MA

- Full Stack Software Engineer for ReMo, a data-management startup that empowers students and teachers to set goals towards reading independence
- Creating a cross-platform mobile app (iOS, Android) to extend the company's existing web infrastructure while working within an Agile environment
- Leveraging GoLang and GraphQL to re-architect ReMo's backend in order to create resolvers that are implemented as endpoints through the use of the Gin Server

Undergraduate Teaching Assistant

Sep. 2022 – June 2023

Northeastern University

Boston, MA

- Hold office hours 4 times a week for Fundamentals of Computer Science 2 to assist students with OOD/Java principles and answer homework questions for Fall 2022 and Spring 2023 semesters
- Overseeing the progression of 600+ students within each semester while promoting their computer science careers

PROJECTS

RoboUmp | Python

Sep. 2023 – Dec. 2023

- Developed a robotic umpire, RoboUmp, a robot designed to detect balls and strikes within a baseball game
- Led the software architecture design for RoboUmp, implementing an MVC pattern and extensively utilizing OpenCV libraries, including Tensorflow, Pytorch, and Mediapipe, in the model for pitcher detection, ball tracking, and strike zone creation
- Engineered a robust communication system between the model and controller using UDP and TCP sockets, enabling seamless frame streaming for real-time analysis, ensuring accurate ball and strike detection through effective algorithm execution

Spotify Recommendation Engine | Python, Neo4j

March 2023 – May 2023

- Developed a song recommendation system using Neo4j and a custom similarity metric based on pre-computed Euclidean distances between 1000 songs, resulting in a recommendation system capable of generating any number of song recommendations based on any input song