

caroline zhu.

(717) 552-6372 • zhu.car@northeastern.edu

EDUCATION

Northeastern University

Bachelor of Science in **Computer Science**

Boston, MA

Sep 2019 - May 2023

Concentration in Artificial Intelligence

GPA: **3.70** / 4.0 | Dean's List

Relevant Coursework: Algorithms, Object-Oriented Design, Computer Systems, Artificial Intelligence, Natural Language Processing, Database Design

EXPERIENCE

Microsoft

Incoming Software Engineering Intern

Bellevue, WA

May 2022

Best Buy

Software Engineering Co-op

Boston, MA

Jul - Dec 2021

- Used agile development practices implement timing and tracking features for an Android app geared towards research participants. Built with **Vue.js**, **Node.js** and **Java**. Set up and maintain **AWS servers** used as the backend for these apps.
- Coordinated with software engineers, embedded engineers, and applied science researchers on a team that pilots potential technology offerings for Best Buy Health

FutureScape Engineering

Software Engineer

Boston, MA

Mar 2020 - May 2021

- Created branding materials, product materials, and wireframes for commercial and nonprofit use, seen by hundreds of people. Produced with **Adobe XD** and **Adobe Illustrator**.
- Designed and implemented a **GUI** using **C#** that allowed users to read and write RFID tags through a connected microcontroller. Worked with bit manipulation and interpreted client instructions on a tight deadline.

Northeastern University

Teaching Assistant

Boston, MA

Sep 2020 - Jun 2021

- Courses covered: **Discrete Structures**, **Fundamentals of CS 2**, **Object-Oriented Design**
- Hosted weekly office hours to tutor students on fundamental computer science concepts.
- Graded, reviewed, and provided feedback on students' assignments for courses of 200+ students. Supervised labs of roughly 40 students.

PROJECTS

SpotiStat | Python, SQL

Jun 2021

- Used the Spotify API and SQL to build up a database of users, their top songs, friends, and playlists. Created logical models of the database using MySQL Workbench.
- Built a Python backend application that allows users to connect and create playlists generated based off of their tastes. Utilized linear algebra to compute similarity between users' tastes.

Political Classifier | Python, ML

Jun 2021

- Classified tweets with political party based on American politics. Improved performance metrics by roughly 15% using normalization and parameter tweaking.
- Scraped and processed tweets from Twitter with a Python library. Applied numerous normalization techniques such as removing stopwords, normalizing case, and manipulating emojis and hashtags using Python.
- Employed the transformers library and multiple BERT models to process tweets into vectors. Used Tensorflow logistic regression trained on the labelled tweet vectors. Also provided the option of reading/writing word embeddings from a CSV file.

SKILLS

Languages: Java, Python, HTML/CSS, JavaScript (Node.js, Vue.js), SQL, C, C#

Technologies: Git, Adobe (Illustrator, Photoshop, XD), Figma, MySQL Workbench, Linux

INTERESTS

AI & natural language processing, crossword puzzles, knitting, crochet, oil painting