LUKE COLOMBO

Education

Northeastern University, Khoury College of Computer Sciences

Boston, MA

Candidate for B.S. in Computer Science & Cognitive Psychology

May 2025

GPA: 3.52/4.0, Dean's List

Activities: Rock Climbing Club, Tastemakers Magazine, IM Sports (Volleyball, Soccer)

Relevant Coursework: Natural Language Processing (Python), Database Design (MySQL), Networks and Distributed Systems, Algorithms and Data, Mathematics of Data Models, Object Oriented Design (Java)

Technical Knowledge

Languages: Java | Python | LaTeX | MySQL | Javascript | HTML | CSS | Scheme/Racket | React

 $\textbf{Software:} \ \ \text{Github} \ | \ \ \text{Microsoft Excel} \ | \ \ \text{IntelliJ} \ | \ \ \text{Visual Studio Code} \ | \ \ \text{SPSS Statistics} \ | \ \ \text{MySQL Workbench}$

Skills: Cloud Computing | Git | TCP/IP Sockets | Command Line Scripting | HTTP | Machine Learning

Work Experience

Digital Ready Computer Science Studio Manager

Boston, MA | Jul. - Dec. 2023

- Supervised and mentored 20 high-school students in a Computer Science Bootcamp course, also supported the math and English courses
- Organized daily lectures and activities; created a curriculum focused on innovation and problem solving
- Oversaw deliverables such as a Python card game project, OpenCV project, and Google certificates in IT Support and UX Design

Safeway Courtesy Clerk

Larkspur, CA | Jul. 2020 - May 2021

- Facilitated cleaning of store, communicated between customers and managers in a fast paced environment
- Assisted with bagging groceries, self-checkout machines, and collecting carts

Personal & Academic Projects

Connections Maker April. 2024 –

- Creating an app to let people create their own NYT connections puzzles and send them to others
- Code written in React/HTML/CSS, app is hosted on the web using Firebase

N-Gram Language Model

Feb. 2024

- Created a language model that is trained on a dataset, and generates text based on the previous n tokens
- Code written in Python with the numpy and matplotlib modules used for graphing and evaluation

Distributed Database

Apr. 2023

- Developed and tested a distributed key-value database, supporting API calls from clients across 5 replicas
- Enforced RAFT protocol for fault tolerance, consensus, and performance in object oriented Python

Connect Four Dec. – Feb. 2023

- Designed program in Java to simulate Connect Four using MVC architecture and a Swing library GUI
- Incorporated the strategy design pattern to add algorithms that let user play against the computer

Extracurricular Involvement

Tastemakers Magazine: Writer of editorials and commentary on the music industry, albums, and concerts Interests: Proficient in Spanish, Jazz Piano, Mountain Biking, Urban Planning, Music Production, Basketball

References available upon request