

# LUKE COLOMBO

LinkedIn URL · Website URL · colombo.l@northeastern.edu · Boston, MA

Availability: May - December 2024

## Education

---

**Northeastern University, Khoury College of Computer Sciences**

**Boston, MA**

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

May 2025

**GPA: 3.60/4.0**, Dean's List

**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 | MySQL | React | Javascript | Scheme/Racket | LaTeX | MongoDB

**Software:** Github | Microsoft Excel | IntelliJ | Visual Studio Code | SPSS Statistics

**Skills:** Git | TCP/IP Sockets | Command Line Scripting | HTTP | Machine Learning | NoSQL | OOD

## 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

---

**Animal Shelter Database**

April. 2024

- Developed an system to track animals, applications, and staff at an animal shelter using a SQL database
- Utilized MySQL for back-end procedures and triggers, Python for front-end functionality via a command-line interface with unique views for managers, volunteers, and visitors

**Connections Maker**

Mar. 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 rule-based language model that generates text based on the previous  $n$  tokens
- 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

## 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