Alanna Pasco

+1 (781) 307 6417
alannaa.github.io - linkedin
pasco.a@northeastern.edu

EDUCATION

Northeastern University
M.S. in Computer Science | GPA: 3.80 **Exp. Graduation Dec 2022**
Coursework: Systems; Algorithms; Object-Oriented Design; Software Development; Mobile App Development

B.A. in International Affairs, minor in Computer Science | GPA: 3.44 **Sept 2016 - Aug 2020**
Awards: Academic Excellence Award; Linguistics Departmental Award

TECHNICAL KNOWLEDGE

Programming Languages: Java; Python; C; HTML/CSS/Javascript
Tools: Vim; Git/Github; Android Studio; Ubuntu
Database Management: GraphQL, Firebase

PROJECTS

Android Dog Walking Application Mobile App Development | **Summer 2021**
- Built back end of a mobile app for dog owners to track and share dog walks, set reminders for dog care, and more
- Managed user data in Firebase Realtime JSON Database, defined data representation of all user data in Java
- Created utility to put and fetch data from Firebase off main GUI thread to minimize UI latency

AI Player Game Server Software Development | **Fall 2020**
- Designed and implemented a scalable client-server gaming system in roughly 8,000 lines of Java that hosts games of *Hey, That's my Fish!* and provides a server to which hackers can connect AI players to compete in tournaments
- Pair programmed and defended design choices in three code walks in front of class of 50 students
- Developed AI player API and composed detailed protocol documentation for the API
- Employed remote-proxy pattern to bring together server-side game system and client-side AI players

Language Predictor Tool Fundamentals of Data Science | **Fall 2018**
- Built a language-prediction tool in Python effective at predicting documents written in one of 7 languages
- Compared trigram frequencies in test set with those in sample set using cosine similarity index to make predictions

Graph Theory Game Fundamentals of Computer Science | **Spring 2018**
- Implemented Light 'Em All in Java, a game to rotate tiles, connect wires, and advance a power station along the wires until entire grid is connected and lit
- Generated continuous wire grid using Kruskal's algorithm, identifying min spanning tree before rotating for gameplay
- Traversed wires using breadth-first search from power station node and visually lit up tiles within a defined radius

PROFESSIONAL EXPERIENCE

Software Engineering Co-op Boston, MA | **Jan 2022 - Present**
Chewy - Pet Health Engineering Team
- Maintain backend Python services using Django, GraphQL, Pytest, Postgres, and the Agile methodology
- Implement user interaction tracking system using MixPanel; empower product managers to collect UI data
- Learn system architecture on the fly; contribute to technical documentation to support onboarding future developers

CS 4500 Software Development Teaching Assistant Boston, MA | **Sep 2021 - Dec 2021**
Khoury College of Computer Sciences, Northeastern University
- Critically review assignment submissions written in students' chosen programming language and peer review grades
- Provide detailed feedback regarding students' design decisions and adherence to programming principles

Program Coordinator Amman, Jordan | **May 2017 - Apr 2020**
Global Experience Office, Northeastern University
- Co-led international experiential study abroad program to Jordan with 38 students for three program iterations

Specialist Cambridge, MA | **Oct 2014 - May 2016**
Apple Inc.
- Anticipated customer needs and offered enriching solutions via sales as well as guided product exploration
- Built relationships with team of over 100 staff members by delivering and receiving constructive feedback regularly