Alanna Pasco

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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; C; Python; HTML/CSS/Javascript
Tools: Vim; Git/Github; IntelliJ; Android Studio
Databases: Firebase Realtime Database and API

PROJECTS

AI Player Game Server   Software Development | **Fall 2020**
- Designed and implemented a scalable gaming system in roughly 7,500 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 in Java *Light 'Em All*, a game to light a power grid by rotating tiles containing wires and moving a weak power station along the wires until the entire grid is connected and all edges of the grid are lit
- Generated continuous wire grid with Kruskal's algorithm, identifying min spanning tree before rotating for gameplay
- Defined radius of power as half of the furthest distance between two nodes; used breadth first search to traverse wires stemming from the power station and light only the tiles within the radius of power

PROFESSIONAL EXPERIENCE

CS 4500 Software Development Teaching Assistant   Boston, MA | **Sept 2021 - Present**
Khoury College of Computer Sciences, Northeastern University
- Solidify students' understanding of course concepts in weekly office hour sessions
- Critically review assignment submissions written in students' chosen programming language and peer review grades

Grants Administrator   Boston, MA | **Jul 2020 - Present**
The Boston Foundation
- Manage grants totaling $15 million annually by compiling and recording information in a readable, organized manner
- Liaise Program Department with technical consultant to design new Grants Management software (GMS)
- Propose system design choices for GMS by combining detailed knowledge of Programs with technical expertise

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
- Developed students' cultural competence through weekly chats; adjusted programming based on student feedback

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