Matan Gans

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EDUCATION

Brown University — Sc.B in Computer Science Providence, RI, Expected Graduation May 2022
GPA: 4.0 out of 4.0
Relevant Coursework: *Introduction to Object-Oriented Programming and Computer Science, Introduction to Algorithms and Data Structures, Introduction to Discrete Structures and Probability, Intermediate Calculus, Statistical Inference, Introduction to Computer Systems*

Lexington High School Lexington, MA, Graduated June 2018
GPA: 4.04 (Cumulative, Unweighted out of 4.0); SAT I: 1530; SAT II: Biology (800), Chemistry (800), Math 2 (790)
Extracurriculars: Varsity Swim Team, Jazz Septet, CS Teaching Assistant, National Honor Society, Global Citizens Corps
Awards: AP Scholar with Distinction Award, National Merit Commended Student, Jason Berger Memorial Scholarship

WORK AND RESEARCH EXPERIENCE

Artificial Intelligence Lab, *Undergraduate Researcher* Providence, RI, Fall 2019 - Present
- Work under the guidance of Professor Carsten Eickhoff at the Brown University Center for Biomedical Informatics
- Apply machine learning and information retrieval mechanisms to assist clinical decision making, avoid medical errors, and ultimately improve patient health
- Use recurrent neural networks to train on patient health data and predict probability of readmission using Python implementation in Keras framework

Penguin Coding School
Teaching Assistant Lexington, MA, Summer 2017 - Spring 2018
- Helped instruct elementary and middle-school students in introductory programming courses
- Worked with small classes of 5-10 students on building and debugging projects involving web and game design

Intern (lexpomegranate.org) Lexington, MA, Summer 2017
- Led a back-end team in the creation of a website to support incoming freshmen with the transition to high school
- Learned to use Django, a Python-based web framework, as well as helping with front-end duties using HTML/CSS

LEADERSHIP AND ENGAGEMENT

Blognonian, *Staff Writer* Providence, RI, Fall 2018 – Spring 2020
- Write articles for a blog publication containing humorous content related to student life on the Brown campus
- Meet with the team once a week to pitch ideas and maintain consistent communication with editors

Brown University Jazz Band, *Bass Player* Providence, RI, Fall 2018 – Spring 2019
- Attended two rehearsals a week, as well as weekly private lessons and regular practice
- Performed in several concerts every semester, and as part of the house band for bi-weekly jam sessions

SELECTED PROJECTS

Shell Fall 2019
- Implemented a program in C to emulate the functionality of a UNIX shell that interacts with users through the terminal
- Features include the execution of built-in terminal commands, redirection to input and output files, creation and control of foreground and background jobs, and the ability to handle signals

Seamcarve Spring 2019
- Used Java to implement a seam-carving algorithm to resize images. Through a dynamic programming approach, found a way to quantify the importance of pixels and alter image size by removing seams of unimportant pixels

Graph Spring 2019
- Used Java to implement a visualization of the graph data structure, and further implemented the Google PageRank algorithm for ranking search results by assigning ranks to graph vertices and distributing the rank among edges to determine the relevance of website pages to a query

SKILLS AND INTERESTS

Technical Skills: Proficient in Java, C, Python; Familiar with C++, HTML, CSS, JavaScript
Languages: English (Native Speaker), Hebrew (Native Speaker), Spanish (Proficient)
Interests: Listening to and playing music, swimming, reading, writing, watching movies, neuroscience