Jeffrey Li

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EDUCATION

Boston University College of Arts and Science

Expected Spring 2021

Bachelor of Arts: Computer Science Major, 3.56/4.00 GPA

Relevant coursework: Python, Java, Algorithms, Computer Graphics, Computer Systems, Combinatoric Structures/Discrete Mathematics, Probability and Statistics, Linear Algebra, Functional Programming

WORK AND LEADERSHIP EXPERIENCE

Java OpenGL 3D Aquarium: Developer

Fall 2020

- A three-dimensional aquarium containing several fish and swordfish to simulate a predator-prey relationship for path traversal.
- Utilized frame-by-frame model transformations from Java's OpenGL library in three-dimensional space to simulate swimming animation and movement for creatures.
- Implemented Gaussian calculations for potential functions of attractive/repulsive fields to simulate a predator's motivation to chase prey and a prey's ability to evade multiple predators.

Java OpenGL 3D Creature Modeling: Developer

Fall 2020

- A three-dimensional display of a simple spider model, including moveable body parts controllable by the user through a set of specified keyboard controls.
- Demonstrates the implementation of chain transformations on rendered objects in a three-dimensional space to simulate proper joint movement.
- Implemented key events to allow user manipulation of the spider's primary joints to change the pose of the model, as well as cycle through a set of preset poses.

COVID-19 Article Summarizer: Developer

Spring 2020

- Developed a web-based program that allows users to receive filter-specified news regarding COVID-19 as a collection of informative summaries.
- Incorporated the News API and SMMRY API with the objective to collect articles and accurately summarize them with minimal loss of information.

Unity Maze Level Development Project: Developer

Spring 2020 - Present

- Utilized the Unity game engine in order to expand my understanding of the platform and pursue my interests in software and game development.
- Incorporated built-in libraries and implemented various algorithms to create a randomly-generated perfect maze.
- Explored the C# programming language through the coding of scripts.

TECHNICAL SKILLS

Programming Skills

Proficient in Python, Java, LaTeX, APIs (Spotify, Weather, News, SMMRY, Twilio), data structures, graphics algorithms

Familiar with Go, C, C#, OCaml, JavaScript, graph/network algorithms

Languages

Fluent in English | Proficient in Cantonese Chinese

Additional Skills

Advanced in Microsoft Word, Microsoft Powerpoint, Google Docs, Google Slides