Wonyoung Kim

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Education San Jose State University

San Jose, CA

Candidate for B.S in Computer Science

Class May 2021

 Relevant CourseWork: Data Structures and Algorithms, Object Oriented Programming, Server-Side Web Programming, Computer Architecture, Linear Algebra, Statistics, Multivariable Calculus, Computer System, Programming Paradigms, Discrete Mathematics.

Skills

- Software: Java, Python, Ruby, JavaScript/HTML/CSS/PHP, Linux.
- Languages: Fluent in Korean and English.

Projects Personal Website

San Jose, CA 2020 Feb - Present

 Using Bootstrap framework and libraries to create a sidebar-equipped Personal Portfolio website.

• Developing user-interface with HTML, CSS, JavaScript.

Pathfinding Visualizer

San Jose, CA

• Built a shortest pathfinding visualizer and randomized 2019 Fall maze generation algorithms.

• Implemented 5 different algorithms based on A*Search and Dijkstra's algorithms.

DNA Sequencer

San Jose, CA

• Displayed mutation's distances in different gene sequences. 2019 Summer

- Stored sequenced gene data in FastA format, and wrote classes to manage and serialize genome-level data.
- Created a string difference algorithm to efficiently detect mutations between reference and possibly mutated genes.
- Used Object-Oriented principles to modularize code and allow for ease of maintenance.

Bloom Filter based URL Shortener

San Jose, CA

Allowed users to provide long URLs and shortens URLs

2019 Spring

- Wrote interface for the URL Shortener using object oriented principles and ensured correctness through unit tests.
- Implemented bloom filter data structure for fast, probabilistic querying of shortened URLs to avoid duplicates.

Experience Korean Tutor

Los Angeles, CA

Scheduled weekly one-on-one tutoring sessions.

2018 Winter

- Created customized teaching syllabus according to each student's need and level.
- Provided feedback and coaching to students to enhance language skills and prepare for tests.

Activities & Awards

Activities: SJSU CS Club, Marathon, Swimming, Boxing, SJSU Wrestling Club.