

Wenyi Shi

shiwenyi@student.deanza.edu

(510)750-5485

[Linkedin](#)

San Jose, CA 95116, USA

SUMMARY

A computer technology enthusiast looking for an internship in software development. Also a Green card holder legal for working in any industry in the US.

EDUCATION

Foothill-De Anza Community College

San Jose, CA

Associate Degrees for Transfer

March 2022 - Present, GPA: 3.66/4.00

UC transfer programs

CA

April 2024, Pending UC decision

COURSES

Program Management, Calculus I, II, III, IV, Discrete Mathematics, Differential Equations, Linear Algebra, Java Programming, Data Abstract & Structure In Java, Advanced Data Structure & Algorithm in Java, OOP in C++, Intermediate Software Design in C++, Advanced Data Structure & Algorithm in C++, Introductory X86 Programming Assembly Lang, Computer Architecture & Organization, Circuit Analysis

ACADEMIC PROJECTS

Command line C++ OOP System(s) ([Github](#) (C++))

Oct, 2023

- Developed Movie TicketMaster, Inventory System, Contact System, Carrier message system

Weather Android app ([Github](#) (Java), [Github](#) (Kotlin))

March 2023

- Developed an Android app to allow user view/query weather data for a city/region
- Use <https://openweathermap.org/> to read weather data
- MVP structure in Java, MVVM in kotlin
- Hilt dependency injection, Android Jetpack, Kotlin coroutine, RxJava and Kotlin Flow

Sorting algorithm analysis (Java, [Github](#))

Aug 2022

- Analyze Insertion sort, Shell sort, Bubble sort, Selection sort and Radix sort
- Compare their performance based on # of comparisons and # of swaps
- Get BigO notation of time complexity in worst case, best case, average case scenarios

Hash functions analysis (Java, [Github](#))

July 2022

- Implement 4 hash functions: Division method, Mid square method, Digit folding method, Multiplication method
- Compare their performance based on a data-set which has 500 Customer(s) POJO, calculate # of conflicts for each of them

Binary search tree implementation (Java, [Github](#))

June 2022

- Implement a binary search tree, support *insert* and *search* operation
- Provide 4 traversal APIs to print the tree: pre-order, post-order, in-order, height-order

Degenerated binary search tree balancing (Java, [Github](#))

May 2022

- Created an innovative bottom-up balancing algorithm after crazy Google search
- Finalized a neat recursive java implementation

Shortest path searching (Java, [Github](#))

April 2022

- Given a graph saved as adjacency list which represent the graph of airplane route map, find the shortest path between two airports.
- Implement DFS with some optimization by pruning paths which have been visited before.

TECHNICAL SKILLS

Languages: Java, C++, Android, Kotlin, JavaScript, HTML, CSS

Framework/Library: Java Collection Framework, C++ STL, Dagger, Android Material Design, RxJava2

Tools: Git, IntelliJ, CLion, Visual Studio, Eclipse, Adobe Photoshop, Adobe Premiere

Operating Systems: Microsoft Windows, Mac, Linux