# SUNGBIN KANG

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#### **SKILLS**

# **Programming**

- C++
- Java
- Python
- Matlab
- PostScript

#### **Tools**

- · Github
- · Visual Studio Code
- Visual Studio
- Eclipse
- BlueJ
- IDLE

#### **Software Development**

- General Programming Skills
- · Software Design
- Software Debugging
- Software
   Documentation
- Software Testing

## **Operating System**

- Linux
- Mac OS X
- Windows

#### **Soft Skills**

- Team-oriented
- Multi-tasking
- · Analytical-thinking
- · Problem-solving
- Written and verbal communication

#### **PROFILE**

Student at Graduate Certificate in Software Design & Development(GCSDD) in University of Washington Bothell that is focused on Object-oriented programming, data structures and algorithms in C++, Design and testing of software systems, Systems programming, Core software engineering and cybersecurity concepts.

Experience in object-oriented programmings(C++, Java & Python); developing, testing and debugging code; designing interfaces; and administering systems and networks.

Three years of experience as a software test engineer; analyzing, executing, and validating test cases, participating in product requirements.

Quickly learn and master new technologies; collaborative and communicative in both team and self-directed settings.

# **EDUCATION**

# University of Washington Bothell, Bothell WA - 2021

Graduate Certificate in Software Development & Design

#### University of Washington, Seattle WA — 2016

Bachelor of Arts in Mathematics Minor in Applied Mathematics

# Seattle Central College, Seattle WA — 2019

CSC 110 Introduction to Computer Programming (PYTHON)
CSC 142 Computer Programming I (JAVA)

North Seattle College, Seattle WA — 2020

#### **EXPERIENCE**

## Software Test Engineer, Tech Mahindra USA Inc.; Redmond, WA — 2017-2019

- Test and prove that the software meets major architectural requirements related to functional, validation, end-to-end and regression testing for mobile devices
- Prove for scalability and performance of a software
- Cooperate with firmware developers and validation engineers
- Develop tests for software validation
- Detect bug issues, prepare file defect reports and report test progress
- · Hands-on experience on Samsung, Apple, Google, LG, HTC, Xiaomi, Nokia

# **Software Test Engineer, Jnd Solutions;** Bellevue, WA - 2016-2018

- · Coordinate and execute testing cases to verify defects within Android software.
- Evaluate software defects and generate test reports
- · Communicate with quality assurance and development team members
- Hands-on experience on testing tools and equipments such as QXDM, QCAT, DM, ADB

#### Manager/Barista, Richmond Beach Café; Shoreline, WA — 2013-2016

- Maintain expenses within budget through planning, waste reduction
- · Responsible for ordering, scheduling, and inventory management
- Make decisions on work hours and hiring, training, and supervising employees

#### **ACADEMIC PROJECTS**

# JavaWord Processor to HTML — JAVA; Spring 2020

- Java build program assign, retrieve, access and manipulate text and style data of paragraph, section, header and document name on a single document, and open (via deserialization), close, new, save (via serialization), and save to HTML.
- Code Implementation: Generic Double linked lists, Serialization, File/folder processing, Enumerate Types, and Singleton design pattern.

#### **Drawing Program — JAVA;** Spring 2020

- Java build program to create drawings of shapes using input instructions with width, height, color, shape name, scale, x and y coordinate, and filled color, if necessary.
- Code Implementation: Generic ArrayList, Iterator, for/each support Serialization, Exception handling(try/catch), File/folder processing, and DrawingPanel class.

# **Huffman Coding — C++;** Winter 2021

- C++ build program to generate Huffman codes for each lower-case letter and then construct codes for words.
- Code Implementation: Huffman coding algorithm using Huffman Tree, Generic Heap, Template class, Priority Queue, Overloading comparison operator

# Dijkstra's algorithm — C++; Winter 2021

- C++ build program to read in a graph from a file, compute the shortest path between every pair of vertices (where they exist), output a shortest path table, and output individual paths when requested.
- Code Implementation: Dijkstra's algorithm, Shortest Path, Generic Graph, Priority Queue, File/folder processing, Dynamic allocation, Copy constructor and Assignment operator

# Collectibles Store Simulation — C++; Winter 2021

- C++ build inventory management system is to provide a ways to store, organize, manage inventory data and customer data. The system allows to initialize all the items in stock, track once the item is bought or sold, and display information of inventory and customers.
- Code Implementation: Generic Hash Table, Generic Binary Search Tree, Factory method design pattern, Inheritance, Polymorphism, Abstract class, Pure Virtual method, Overriding method