# KANNIKA ARMSTRONG

a-kannika.github.io/v1 github.com/A-Kannika

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### **EDUCATION**

Tacoma, WA University of Washington

Jan 2021 – Dec 2022

• Bachelor of Science in Computer Science and Systems. Accumulated GPA: 3.98

Puyallup, WA

Pierce College

Jan 2020 – Dec 2020

• Associate in Arts in Academic Transfer AA DTA, Computer Science. GPA: 4.0

Chiang Mai, Thailand

**Chiang Mai University** 

May 1999 - Mar 2004

• Bachelor of Science in Physics, minor in Mathematics

## PROJECT EXPERIENCE

- Maze Generator Program (2021). Built the graph data structure and implemented a graph by using the depth-first search algorithm. This program can create a 2-dimension maze with no cycles, and the algorithms exist to generate random mazes. Java, IntelliJ
- My Personal Website Version 1 (2021). Created the personal portfolio website that showing the creativity, design, and development of the first personal website. HTML, CSS, and JavaScript.
- Compressed Literature version 2 Program (2021). Built the program to compresses characters file to a binary file format, using the hash table data structure and the Huffman algorithm. Java, IntelliJ
- Compressed Literature version 1 Program (2021). Built the program to compresses characters files to binary files format, efficiently using the minimum heap data structure and a priority queue. Then implemented the Huffman compression algorithm. And the program uncompressed the binary data back to characters data. Java, IntelliJ
- **Unemployment Analysis** (2021). Analyzed the unemployment rate in March 2021 in the urban counties is lower than that of the rural county counterparts in Washington State and Oregon State. R
- Multi-Function Calculator Program version 3 (2021). Developed calculator program that can calculate decimal, binary, and hexadecimal numbers. This calculator also can convert binary and hexadecimal to decimal, and vice versa. The calculator also has the bandwidth calculation function. Multi-Function Calculator version 3 uses Object-Oriented Design, MVC Architectural patterns, and Abstract Data Types. Java, IntelliJ, JUnit, and GUI

#### WORK EXPERIENCE

- **Professional Calculus Tutor (Part-time)** (April 2021 present): Performing the assigned tutor in the calculus1 classes and the drop-in tutor for precalculus, calculus1, and calculus2. Moreover, organizing the subject proficiency workshops for the peer tutors.
- Calculus Tutor (Part-time) (Oct 2020 March 2021): Performing the assigned tutor in the calculus1 classes and the drop-in tutor for precalculus, and calculus1.

## ADDITIONAL EXPERIENCE AND ACHIEVEMENTS

- Meteorologist/Climatologist (May 2006 May 2018): Performed Meteorologist and Climatologist position at the Thai Meteorologist Department for 12 years.
- Chancellor's List: Spring and Fall Quarter 2020 at Pierce College, Puyallup, WA.

## **Languages and Technologies**

- Java; SQL; Python; R; JavaScript; HTML; CSS; Git
- IntelliJ; R studio; Visual Studio Code; SQLite; GitHub