Derek Avery

Computer Science Student

Personal Info

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LinkedIn
https://www.linkedin.com/in/averydl

GitHub
https://github.com/averydl

Website
http://averydl.com

Languages

Proficient Using:

- Java
- C++
- Python
- SQL

Experience With:

- MATLAB
- R
- XML, JSON
- Bash
- HTML, CSS

Software

- MySQL
- Git, GitHub
- Vim
- Make
- Wireshark
- IntelliJ, NetBeans, JGrasp

Education

Bellevue College

Graduation: Jun 2020

- Computer Science (BS)

University of Washington

Sep 2013 – Jun 2017

- Civil Engineering (BSCE)
- Chemistry (BS)
- Biochemistry (BA)

Coursework

Bellevue College

- *CS 210/211* - Fundamentals of CS I/II (Java) - *GPA: 4.0*
- *CS 300* - Data Structures (C++) - *GPA: 4.0*
- *CS 331* - Database Systems (SQL, Java) - *GPA: 4.0*
- *CS 341* - Computer Networks (Java) - *GPA: 4.0*
- *CS 351* - Computer Architecture - *In Progress*
- *CS 341* - Programming Languages - *In Progress*

University of Washington

- *AMATH 301* - Applied Computing (MATLAB)
- *STAT 390* - Statistical Methods in Engineering & Science (R)

Projects

Rainfall Data Processing (Python)

Implemented python module with functions designed to:

- Preprocess space-delimited weather data files with missing dates to add placeholder ‘null’ values
- Combine weather data files from stations with overlapping time periods to determine the maximum rainfall observed at multiple stations on the same date
- Reformat line-by-line rainfall data into a user-readable, monthly format for interpretation or further analysis using Excel

Data Structure Benchmarking (C++)

- Implemented hash table, binary search tree, and simple array-based data structures to store and retrieve generic types
- Developed text processing program to extract and store data from a CSV file to populate data structures
- Wrote benchmark program to test runtime performance of each data structure relative to data set size and write results to file

Experience

Civil Design Engineer - MKA (Jun 2017 - Sep 2018)

- Implemented programs and scripts for engineering calculation and data analysis using Python, VBA and SQL
- Coordinated with numerous project stakeholders during multiple stages of project development
- Verified conformance with specifications under tight deadlines

Project Scientist – Clear Water Services (Jun 2016 – Dec 2016)

- Engaged in troubleshooting of existing VBA code used for automated data collection from remote sites
- Designed Microsoft Access reports to summarize relevant water quality data for active project sites