# ${\bf Michael~Alberda}~~malberda 15@gmail.com~/~2087612179~/~Boise,~ID~/~https://github.com/malberda 15@gmail.com/malberda 15@gmail.c$

#### Education

University of Idaho

Moscow, ID

BS Mathematics - Computation Option, GPA: 3.5

September 2017 | May 2021

**Boise State University** 

BS Computer Science

Boise, ID

August 2021 / Ongoing

### Work

Tap Network LLC

Boise, ID

Software Intern

January 2022 | Ongoing

- Work with developers and other interns to create documentation for existing codebase

**YMCA** 

Boise, ID

Head Lifeguard

June 2016 | September 2017

 Work with other lifeguards to maintain a clean and safe place of business and engage with patrons to secure a happy YMCA

Dr. Neuhaus

Moscow, ID

Grader

September 2019 | September 2020

- Cleanly and correctly grade all homework and deliver it on time to the professor

### **Skills**

Proficient Programming Languages: C, C++, Java, Linux Shell

Familiar Programming Languages: JavaScript, HTML, Python, Unity

Other Relevant Skills: Scrum and Agile Development, Git

## **Projects**

Reduction of States in a Finite Automaton C https://github.com/malberda/cs385finalproject
Demonstration of the concept of reducing states in a finite automata

Optimal Binary Search Tree JavaScript https://github.com/malberda/project-395
A simple visual demonstration of an optimal binary search trees creation and expansion

CPU Scheduling Simulation Java https://github.com/malberda/CPUSchedulingEmulator Emulates a simple CPU and its scheduling of processes

School Database Manipulation SQL https://github.com/malberda/BSU-HU-CS-310-Final-Project Manipulate data from a simple database in order to display skills learned

**Data Structures Bioinformatics** Java <a href="https://github.com/malberda/BTree-BIOINFORMATICS">https://github.com/malberda/BTree-BIOINFORMATICS</a> Create a B-Tree that stores and performs operations on a series of excerpts of the human genome. Implement a cache in order to speed up processing while searching the genome for frequencies of specific substrings.