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

#### Education

**Boise State University** 

Boise, ID

BS Computer Science

August 2021 | May 2023

University of Idaho

Moscow, ID

BS Mathematics - Computation Option, GPA: 3.5

September 2017 | May 2021

### **Experience**

Tap Network LLC

Boise, ID

Software Intern

January 2022 | Ongoing

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

Dr. Neuhaus

Moscow, ID

Grader

September 2019 | September 2020

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

Treasure Valley YMCA

Boise, ID

Head Lifequard

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 and healthy YMCA

#### **Skills**

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

Familiar Programming Languages: TypeScript, JavaScript, HTML, Python, Unity

Other Relevant Skills: Scrum and Agile Development, Git Workflow

## **Projects**

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

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

CPU Scheduling Simulation Java https://github.com/malberda/CPUSchedulingEmulator Emulate a simple CPU and its scheduling of processes using Java and a cache system

School Database Manipulation SQL - https://github.com/malberda/BSU-HU-CS-310-Final-Project Create a databse and manipulate data from it in order to simulate a schools database.

**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.