### **Bryan Flores**

### 5268 Belvedere St, Oakland CA 94601

## **EDUCATION**

# University of California, Berkeley

Bachelor of Arts in Computer Science

Fall 2020-Current

Relevant Coursework: CS61A: Structure & Interpretation of Computer Programs (Python), CS 61B: Data Structures (Java), CS 61C: Great Ideas of Computer Architecture (C, RISC-V), CS 70: Discrete Math and Probability, CS169A: Introduction to Software Engineering (Ruby/Ruby on Rails, Javascript), Data 100: Principles and Techniques of Data Science (Python, SQL, Pandas)

### **SKILLS**

**Languages**: Advanced: Python, Java, C. Proficient: Ruby, SQL, Javascript, HTML, CSS/Bootstrap **Other**: Git, Matplotlib, Seaborn, Numpy, SIMD, Pandas, RISC-V, Ruby on Rails

# **PROJECTS**

# **Representative Finder**

- Created a full-stack web app using Google's Civic API to find representatives of any given location along with news articles of given topic through Google's News API.
- Implemented using Ruby/Ruby on Rails, HTML, CSS, Javascript

#### Jump

- Built a board game in Java from concept to product, complete with an opposing AI.
- Implemented AI with alpha-beta pruning with a heuristic and minimax algorithm designed to beat the human player within a set number of moves.

#### **Version Control System**

Designed and created a version control system from scratch mimicking some of the basic features
of the popular system Git by applying the Depth First Search (DFS) algorithm within an undirected
acyclic graph data structure.

#### Mini Numpy

- Built a simple version of the Numpy library in C with addition, multiplication, and power functions
- Optimized using SIMD, OpenMP, and methods of cache blocking, loop unrolling, and repeated squaring achieving speeds of up to 50x faster than a naive implementation via data and thread-level parallelism

### **WORK EXPERIENCE**

#### **Berkeley Art Museum and Pacific Film Archive**

Spring 2021 - Current

**Visitor Service Assistant** 

 Interacted with 100+ people a day providing them with the necessary information or acting as a liaison between the visitor and the various departments within the museum such as that of the curators, store, film archive, etc.