MAX VINK

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EDUCATION

University of California, Berkeley

Bachelor of Arts in Computer Science and Political Science, Graduating May 2025 | Major GPAs: CS 4.0/4, PS 3.8/4

- Relevant CS Coursework: Data Structures, Game Theory, Discrete Mathematics and Probability Theory, Empirical Analysis and Quantitative Methods, Introduction to Computer Programs

SKILLS

- **Programming Languages:** Python, Java, Scheme, SQL, R, MATLAB, HTML, CSS, JavaScript, C
- **Technologies:** Git, React.js, Heroku, MongoDB
- **Technical Experience:** Data Structures, Object Oriented Programming, Web Development, Data Analysis, Algorithms
- **Other:** Spanish (conversational with literary proficiency)

PROJECTS

Amped Discord Music Bot

- Optimized Discord user experience by building a bot that replicates the features of Rhythm plugins (deprecated)
- Allows the download and play of YouTube audio files directly inside Discord voice, bypassing the Spotify ad alternative
- Utilized Python for the backend to call Discord developer API for frontend interface

Machine Learning Analysis on Recidivism Risk

- Created a Recidivism model without leveraging race against parolees for equal risk assessments for equal circumstances
- Developed in Python and fed 2.6 million entries, this model escapes historical data biases of over-policing & over-sentencing, saving marginalized persons thousands of dollars

CS61b Worldbuilding Engine

- Engineered an interactive 2D tile-based world engine that generates a fully interactable world
- Demonstrated understanding of Java, GUI, and data structures by designing an efficient, pseudorandomly generated world with persistence, dynamic lighting, scoring, customizable avatars, and a dynamic HUD

CS61a Scheme Interpreter

- Designed an interpreter that parses and evaluates user-generated Scheme code
- Demonstrated understanding of Scheme, Python, interpreters, and tail-recursion by tokenizing and parsing Scheme inputs defined by Scheme syntax, including creating tail-recursion optimization with Python

Guitar Hero Lite

- Implemented a synthesizer that replicates superimposed plucked guitar string to create challenging levels
- Employed Java to iteratively call the Karplus-Strong algorithm over linked list deques to initialize music tracks

Maxvink.me

- Developed a website to chronicle and catalog personal achievement (and teach myself languages)
- Utilized HTML, CSS, and JavaScript in development of over 2,000 well-documented lines

LEADERSHIP EXPERIENCE

Telegraph for People (October 2021 – June 2022)

Director of Political Strategy and Outreach

- Authored filter & sort mailing list response algorithms that return lists of recipients likely to respond to future communications and maintained respondent information database
- Mobilized and coordinated Telegraph4People's efforts to win city council votes for transforming Southside into a bike, bus, & pedestrian-centric neighborhood, organize the largest march in Berkeley in 5 years
- Played a pivotal role in generating turnout for the vote for a litany of million-dollar construction projects