Vaishak Krishna

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Education

University of California, Berkeley (GPA: 3.86/4.0) **Aug. 2020 – Present**
In progress: Bachelor of Arts in Computer Science *Berkeley, California*
Awards/Honors: Dean's list, Upsilon Pi Epsilon CS Honor Society.

Relevant Coursework

- Data Structures
- Discrete Mathematics and Probability
- Structure and Interpretation of Computer Programs
- Algorithms and Intractable Problems
- Computer Architecture
- Designing Information Devices and Systems
- In progress: Operating Systems
- In progress: Foundations of Data Science

Experience

Computer Science Mentors **January 2022 – May 2022**
Mentor *Berkeley, California*

- Taught data structures concepts as a **mentor to five students weekly** with an effectiveness rating of **4.5/5.0**.
- Co-led a task force and **taught a class of 20** computer science students about concepts in "Git" and "GitHub".

QBurst **June 2021 – July 2021**
Backend Software Engineer Intern *Remote*

- Implemented **three REST API methods** to view/add customer lead data using the .NET framework and SQL server.

Gifted Gabber **June 2022 – August 2022**
Research Assistant under Dr.Rajagopal Appavu *Remote*

- Procured men's prostate cancer **data sets** and clinical trial results for data visualization and drug efficacy analysis.
- Established effective student/professor lines of communication for a **50% reduction in unnecessary emails.**

Projects

Wordle Improved | https://wordlem.top |*JavaScript, React, HTML/CSS, Cloud Computing* **May 2022 - August 2022**

- Launched a **responsive, improved** version of the hit game "Wordle" using ReactJS, hosted in cloud servers.
- Construced a **< 5 second** information theory solver that is **97% as good** as the current best solver (3.54 avg guesses).
- Ensured compatibility with **multiple operating systems and browsers** using various Web APIs.
- Deployed the web app for **400+ visitors** by configuring **Apache HTTP server** on Linux machines in the **cloud**.

EVA Poker AI | *C++, Java, Python* **July 2022 - Present**

- Co-Developed an **efficient and intuitive** command-line Texas Hold-em poker simulator in Python for 2-8 players.
- Optimized an iterative **AI solver** (CFR) for Kuhn Poker in C++ (vs. Python) for a **30x speed up** in runtime.
- Designed a **novel version of Poker** to aid the eventual development and debugging of the Texas hold-em solver.

School Projects | *Python, Java, C* **January 2020 - May 2022**

- Developed a **genetic optimization algorithm** in Python for a project to achieve a ranking of **5th place out of 220.**
- Programmed a two-player PVP game with random world generation in Java using **object-oriented principles.**
- Implemented **voice recognition** for a robot car in C using **SVD and Machine Learning** to classify sound waves.

Technical Skills

Computer Languages: Python, JavaScript, Java/JUnit, RISC-V Assembly, C/C++, HTML, CSS, C#
Developer Tools: VS Code, IntelliJ, PyCharm, Eclipse, Visual Studio
Technologies/Frameworks: ReactJS, Git/GitHub, Microsoft Azure, Linode, Jyupiter Notebook, Linux, .NET, Django

Other Skills/Hobbies

- Languages: English (Bilingual Proficiency), Malayalam (Bilingual Proficiency), Hindi (Limited Working Proficiency), Mandarin Chinese (Limited Working Proficiency)
- Trombone Performance - accepted/performed in various ensembles at the school, state, and all-national levels.
- Hobbies - Computer Hardware, Weight Lifting, Rubik's Cubing, Video Games.