Vaishak Krishna

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 - Present

- 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 $\mid C++, Java, Python$

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.