Rabiea Raja

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EDUCATION

University of California, Berkeley | Berkeley, CA Graduation May 2022

B.A. - Cognitive Science, Computer Science & Artificial Intelligence Emphasis *Cumulative GPA: 3.64*

Coursework: Data Structures, Algorithms, Structure of Computer Programs, Artificial Intelligence, Discrete Mathematics, Foundations of Data Science, Machine Learning, Product Management, UI Design and Development, Designing Information Devices and Systems, Computational Models of Cognition.

SKILLS & TECHNICAL TOOLS

Languages: Python, Java, HTML/CSS, SQL, JavaScript, Scheme, R

Technologies: Git, Pandas, ReactJS, Regex, Figma, Jupyter Notebook, Office Suite, Figma, Google Suite, Adobe Illustrator

EXPERIENCE

AI/ML Researcher | UC Berkeley College of Engineering *June 2021 - October 2021*

- Applied Machine Learning techniques to early-stage projects in behavioral operations management to learn customers' preferences and offer personalized recommendations based on their previous internet history using Python and Java.
- Studied customer responses to machine-generated data, researched how AI should be designed effectively to optimize and improve user compliance whilst taking into account individual consumer behavior and their security.
- Developed the basis of our internal platform using the research collected for the department's future endeavors.

Computer Science Tutor | Computer Science Mentors *January 2022 - May 2022*

- Leading bi-weekly group tutoring sections for 15+ students enrolled in the Structure and Interpretation of Computer Programs (CS61A) course at UC Berkeley.
- Annotating over 14 weeks of instructional content regarding data structures, coding projects, and algorithms in Python, SQL, and Scheme.
- Provided debugging recommendations and clarified concepts relating to coding labs, test prep, and projects.

Design Lead | Cognitive Science Student Association *Aug 2020 - May 2022*

- Designed and marketed visual, informative, and marketing material throughout the year using Figma.
- Spearheaded our design team of 15 CSSA members to curate content for year-round events.
- Collaborated with the external relations committee to coordinate, plan and execute our annual California Cognitive Science Conference.

Researcher | Stanford Health Care *May 2018 – March 2020*

- Studied Vision Correcting Displays within the Oncology department by using computational display technology which pre-distorts presented content for patients through hardware and software so that target images are perceived without eye wear.
- Improved computer vision algorithms and eye tracking devices using Haar Cascades, analysis, and 3D modeling graphs.

PROJECTS

Bear Maps | *Java*

- A Google Maps inspired clone of the UC Berkeley campus. This was created using Java and I implemented A* algorithms to find the shortest route between two points and KD-Trees to find the nearest destination point to the position clicked by the user.

Gitlet | *Java*

- A version-controlled system which mimics the basic features of the popular system Git. Written in Java, some of Gitlets functions include: saving contents of file directories, restoring versions of one or more files/entire commits, and viewing the history of your backups.

Ants | *Python*

- Combined function & object-oriented programming paradigms to create a game similar to Plants vs. Zombies. Users must defend their ant queen from bees by posing a series of challenges to combat attacking bees.