Ryan Kwong

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I am excited to apply my computer science education from UC Berkeley to solve real-world challenges, particularly in the intersection of biology and technology. My experience with projects like the N-Body simulation demonstrates my ability to model complex systems and develop computational solutions. I am eager to contribute to Novozymes' innovative work by leveraging my skills in data science, software engineering, and interdisciplinary problem-solving.

Education

University of California, Berkeley, (June 2024-May 2026**)** Bachelors of Science in Electrical Engineering and Computer Science

Diablo Valley College, (May 2022-Aug 2024**)** Associates of Science in Computer Science

Skills

- Languages: Python, C++, SQL, JavaScript, Java
- Tools/Technologies: Tensorflow, Keras, OpenCV, Docker, Git
- Other Skills: Data Analysis, Software Development, Machine Learning Modeling,

Employment History

Best Buy Co. Inc., (Jul 2022-Present) Sales Advisor

- Provided technical guidance to customers, improving their understanding of complex electronic products.
- Collaborated with a team to drive sales, demonstrating strong teamwork and initiative.

Panda Restaurant Group, (Jul 2022-Present) Kitchen Helper

- Delivered high-quality customer service in a fast-paced environment, ensuring a positive dining experience.
- Managed multitasking responsibilities efficiently, balancing food preparation and customer interactions.

Cisco Systems Inc., (Jul 2021 - Aug 2021) Intern

- Used Python to generate a dataset of over a million labeled sentences for a natural language processing model for an inventory AI. Implemented supervised learning to train a chatbot model
- Implemented test cases to ensure that the generated dataset met the required specifications.
- Utilized Git to manage and document the various features of our algorithm so that other teams could use our algorithm, as well as presented and demonstrated our algorithm to Cisco mentors to showcase its features.

Projects

N-Body Simulator

- Designed and implemented an N-body simulation in Python using NumPy and Pygame to model gravitational interactions between celestial bodies with real-world scaling.
- Optimized performance by using efficient numerical methods such as Verlet integration, managing numerical stability, and efficiently rendering gradients, tracers, and collision effects.
- Built a dynamic GUI with Pygame for real-time interaction, enabling users to adjust parameters, add/remove bodies, and visualize vector properties.

Hand Gesture Recognition System

- Designed and trained a deep learning model using MobileNetV2 and TensorFlow to classify hand gestures.
- Improved accuracy by implementing data augmentation and hyperparameter tuning, achieving higher recognition accuracy.