Rishi Tikare Yang

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OBJECTIVE

I am a recent graduate from UC Berkeley with a bachelor's degree in Computer Science, specializing in machine learning, math, robotics, and green energy. I am looking for my first job and I want to be in a position where I am learning, where I gain quality experience and to where I can form my future career goals such as pursuing graduate school, entrepreneurship or industry career. I am interested in a variety of roles, and in particular roles involving software, data science, math and engineering. I am also most interested in living in the Bay Area, and would love to work towards helping people and the environment in the green energy or sustainable technology field.

EDUCATION

University of California, Berkeley — Berkeley, CA
B.A. in Computer Science - GPA: 3.8/4.0 — *Class of 2024*

- Machine Learning, Photovoltaic Devices, Probability and Information Theory, Optimization, Robotics, Algorithms, Discrete Math, Data Structures.
- Studied at the Universidad Nacional Autónoma de México, earned a GPA of 9.0/10, and took Databases, Anthropology of Afro-Americans, Global Systems, and Geography in L.A.

EXPERIENCE

Modeling an Optical Computer for Image Classification — Sandia National Labs
Physics Modeling, Unsupervised ML, CUDA, PyTorch — *Summer 2023*

- Designed and coded a model of a photonic computer to classify images of material data
- Integrated GPU optimizations using pytorch and CUDA
- Worked with an international team of research scientists and graduate students, gave an oral presentation, and wrote a scientific-paper style report

Outreach Head for STEM Mentorship Club — UC Berkeley Club, BEAM
Leadership, Communication, Committee Head, Site Leader — *August 2020–May 2024*

- Education club at UC Berkeley focused on inspiring interest in STEM fields and providing accessible science lessons to our local community by teaching weekly science lessons
- Lead the Outreach committee responsible for organizing volunteer events and socials
- Lead a group of 4-5 college students every semester to teach weekly science lesson

University Immunology Laboratory Intern — UNM Health Sciences
Computational Biology, Computer Vision, Live Mouse Model — *Summer 2019*

- Studied the effect of lactic acid on the motility of T-cells under Professor Judy L. Cannon
- Worked both in the lab to isolate and cultivate T-cells in a sterile fume hood, and collect images with a fluorescent microscope.
- Worked on software program to quantify motility of cells using computer vision techniques

PROJECTS

Robotic Interaction with Object Centric Environment — Class EECS 106a
Robotic Control, Computer Vision, Unsupervised Learning, — *Fall 2023*

- Worked with a PhD student for her research on unsupervised, object-centric computer vision and robotic control. Researched integrating unsupervised image segmentation.
- We developed a robot that could adaptively model the environment from a moving camera, and used an inverse kinematic controller to pick and place blocks
- https://vint-1.github.io/eecs106a-website/

Conv Neural Network for CIFAR-10 - Class Project — Class CS189
Machine Learning, CNN, Classification, PyTorch — *Spring 2024*

- Designed, built, tuned and validated a CNN that achieved a 77.4% classification rate on a CIFAR-10 testset
- Build a CNN package from scratch in python for educational purposes

Voice Controlled Car - Class Project — Class EECS 16b
Classification, Control, Feedback, Signal processing — *Summer 2021*

- Built a voice controlled car using a microcontroller, breadboard, and other components
- Designed circuits, used feedback in the steering control, and machine learning in the control and voice recognition parts of the robot

Godot Video Game - Personal Project *github.com/rishikiram/Easternly-Apps* — Self Led
UI/UX, Physics Engine — *Summer 2021*

- Created an endless, side scrolling video game including all of the art, a physics model and procedural generation. Used various open source software, namely the Godot engine.
- Designed the UI with minimalist ideas focused on interactive learning

REFERENCES - **Contact info upon request**

1. Dr. Prasad Iyer - Metasurface & Optics, Senior Member of Technical Staff at Sandia National Labs
2. Dr. Judy Cannon - Prof. of Immunology at UNM, Infectious Disease, & Computational Immunology

SKILL AND INTERESTS

Programming Languages - Python, Java, ROS, C, RISC-V, HTML, SQL, Scheme
Interpersonal - Leadership, Teamwork, Communication skills. Fluent in English and Spanish
Interests - Sports, Outdoors Activities, Piano, Cooking, Origami, Learning Languages