Rishi Tikare Yang

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EDUCATION

University of California, Berkeley

B.A. in Computer Science - GPA: 3.8/4.0

Berkeley, CA 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

Physics Modeling, Unsupervised ML, CUDA, PyTorch

Sandia National Labs 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

Leadership, Communication, Committee Head, Site Leader

UC Berkeley Club, BEAM 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

Computational Biology, Computer Vision, Live Mouse Model

UNM Health Sciences 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

Robotic Control, Computer Vision, Unsupervised Learning,

Class EECS 106a 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/

Voice Controlled Car - Class Project

Classification, Control, Feedback, Signal processing

Class EECS 16b 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

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