# Rishi Tikare Yang

RishTYang@gmail.com +1 (505) 377-0420 | California github.com/rishikiram linkedin.com/in/rishi-yang-82a99120a

### **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

# **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

**Godot Video Game** - Personal Project *github.com/rishikiram/Easternly-Apps* UI/UX, Physics Engine

Self Led 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

#### SKILL AND INTERESTS

**Programming Languages** - Python, Java, 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