# JERRY PAN

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### **EDUCATION**

# University of California, Berkeley

Aug 2020 - June 2024

B.A Computer Science & Statistics (Dean's List for all semesters)

Cumulative GPA: 3.95

Relevant Coursework: Multivariable Calculus, Linear Algebra & Differential Equations, Functional Programming, Data Structures & Algorithm, Computer Architecture, Discrete Mathematics and Probability Theory, Data Science, Advanced Probability Theory, Efficient Algorithms and Intractable Problems, Database Systems, DeepLearning.AI

### INTERNSHIP & RESEARCH EXPERIENCE

# UC Berkeley RISELab

Berkeley, CA

Undergraduate Researcher

Oct 2021- Present

- · Built Large Language Model inference benchmark for GPT2, Transformer-XL, XLNet in PyTorch
- · Came up and Implemented various cache mechanism to speed up model inference with only slight increase in Memory Usage.

# Sophon Tech - HFI.one & HYFI.pro

Beijing, China

Software Engineering Intern

May 2021- July 2021

- · Deployed auto-compounding algorithm and value-locking in smart contracts in Solidity.
- · Fixed the front-end annual percentage rate bouncing by designing a delayed time-weighted algorithm for profit calculation.

# University of Cambridge - Behavioral and Clinical Neuroscience Institute Cambridge, UK Visiting student, undergraduate researcher Dec 2020 - May 2021

- Trained Hidden Markov Model to segment multivariate time series into states that are characterised by their unique quasi-stationary spectral properties in the context fMRI and EEG.
- · Statistically inferred the consciousness state by processing experimental neuroscience data, including fMRI and EEG.

### Stanford University Biology Department - Fraser Lab

Stanford, CA

Research Intern (Genomics Research Internship Program at Stanford)

July 2019 - Aug 2019

- · Conducted advanced statistical analysis methods on 56 metagenomics bacterial colony and illustrated the statistical significance of experimental results and trends with visualization tools.
- · Built a pipeline in Nextflow to connect individual command-line genome assay modules, including Glimmer 3, Sickle 1, and Bowtie 2, to effectively parallelize computation on clusters.

### **PROJECTS**

# Full-stack NFT Mystery Box Game Platform (PyTorch, React, Figma, Solidity)

Backend Engineer and Product Manager

July 2021- Present

- · Web-crawled the source photos, applied the pre-trained CycleGAN model to fuse the generate background from Cyberpunk background and algorithmically generate the product image.
- · Took the lead to polish MVP to build on different chains while adapting to different APIs.
- · Built on Rarible Protocol; NFT Payment Solutions; A Scalable NFT Art Project; Gaming & NFTs
- · 1st Prize in NFT Vision Hackathon As the Best Scalable NFT Art Project

### TECHNICAL STRENGTHS

Languages Python, Java, R, MatLab, Unix/Linux, SQL, HTML/CSS/JavaScript Git, Node.js, React.js, Express, MongoDB, Redis, Django, PyTorch

### ADDITIONAL INFORMATION

IEEE UC Berkeley Member, Berkeley UPE Honor Society

BCAIA Scholarship - awarded \$23750 for the 2020-2021 academic year

Interests & Hobbies: YouTuber, Workout, Half-Marathon, Swimming, Chess, Jazz drum, Investment