

Dhruv Pareek

dhruvpareek12@ucla.edu
415-870-5319
<https://dhruvpareek.vercel.app/>

EDUCATION

UCLA Samueli School of Engineering

Bachelor of Science, Computer Science

Los Angeles, California

September 2021 – June 2025

Activities and Societies: Blockchain at UCLA (President, Blockchain Research Group (Research Assistant), Intramural Sports

GPA: 3.8/4.0

Relevant Coursework: Software Construction, Distributed Algorithms and Blockchains, Operating Systems Principles, Introduction to Algorithms and Data Structures, Discrete Structures, Computer Network Fundamentals, Programming Languages,

EXPERIENCE

Royco Protocol

Los Angeles, California

Smart Contract Engineer Intern (Contract)

September 2024

- An “Incentivized Action Market” (IAM) Protocol enabling the creation of orderbook-based markets for any on-chain action (e.g., providing liquidity, minting NFTs), improving price discovery in incentive markets.
- Designed and debugged the “Vault Market” using the ERC-4626 tokenized vault standard, facilitating efficient interaction between users and incentive providers.
- Built a comprehensive test suite of unit tests with fuzz testing in Foundry for the “Vault Market” and finalized smart contracts ahead of Cantina audits.

Humble LA

Los Angeles, California

Software Engineering & Firmware Engineering Intern

June 2023 – August 2024

- Company developing industrial grade batteries to replace generators at live events/film shoots along with software for battery management and measuring emissions.
- Developed and deployed a full-stack web app to calculate emissions (CO₂, CH₄, N₂O) using AICP payroll format, with React, AWS Lambdas, and DynamoDB hosted on Vercel.
- Programmed ESP32 devices in Python for battery management, enabling ModBus and CanBus communication to control charge, voltage, and safety parameters. Created a library for ModBus, CanBus, and LoRa communication across ESP32 devices.

SWFT Blockchain

Remote (San Francisco)

Quality Assurance Engineer Intern

June 2022 – September 2022

- Platform providing wallets and cross-chain swaps for both NFTs and cryptocurrencies.
- Worked with the engineering team to design and execute test software, document test results, and identify and resolve bugs.
- Measured user behavior around various feature sets; pulled data from internal and external repositories and used Python and SQL to clean, wrangle, and analyze data. Presented findings in Excel Spreadsheets to product managers and product lead.

Blockchain at UCLA

Los Angeles, California

President

September 2021 - Present

- Led presentations on Blockchain topics (e.g. Layer 1's such as Bitcoin/Ethereum, DeFi protocols, Decentralized Social Networks), ran workshops teaching students how to write Solidity smart contracts, and hosted speakers from A16z, Messari, Aptos, and more.
- Created blockchain [learning resources](#) for new and prospective members.

PROJECTS

The Book Fund (<https://github.com/DhruvPareek/TheBookFund>)

- Developing Solidity smart contracts to connect UCLA students with donors, enabling reimbursement for book purchases via USDC. Built a frontend with TypeScript and Next.js to interact with the smart contracts.
- Implemented donation and withdrawal logic through smart contracts, allowing students with a verified @ucla.edu email to withdraw USDC matching their bookstore purchase amount.
- Integrated Chainlink Functions to retrieve purchase data from an outside database and bring it on-chain.
- Utilized the ZKEmail Library and Circom circuits to generate ZK proofs for on-chain verification of UCLA student emails.

Safe Transactions (<https://safe-transactions-frontend.vercel.app/>)

- Developed a Solidity smart contract enabling secure ETH or ERC20 transfers, where only the intended recipient can claim tokens using a secret string & senders can cancel unclaimed transactions to ensure funds are not lost.
- Stored hashed data (secret string, amount, and recipient address) on-chain for verification, preventing unauthorized claims.
- Frontend built using TypeScript, smart contracts (on testnet) integrated into frontend with Wagmi and WalletConnect.

SKILLS

Technical Tools/Languages: Solidity, Foundry, Circom, C++, Python, Javascript (React, Typescript), Node, HTML, Git, SQL