

YuChen

Job area: Defi, Smart Contract Development of Solidity, Rust or Zero-knowledge Proof

Date of birth: 1992.04

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Education background

- 2011.09-2015.07

Beijing University of Chemical Technology

Bachelor of Material Science & Engineering

- 2017.02-2019.01

University of New South Wales

Master of Renewable energy Science & Engineering

- 2021.06-2022.12

Renmin University of China

Master of Business Economics (part-time)

Work experience

- 2019.03- 2020.10

Horgos Chint Technology Service Co., Ltd.

Algorithm Engineer

- 2021.01- 2022.01

Beijing Qunar Software Technology Co., Ltd.

Senior Algorithm Development Engineer

Project experience (including self-study)

Defi

Build UniswapV1V2 back-end core code from scratch, including constant product algorithm implementation, adding and removing liquidity, ethToToken and tokenToEth function: Ethereum and ERC20 token swap and token swap (V1) through Ethereum as relay. The Factory contract acts as a registry to create and manage token transaction pools. UniswapV2 trades any two ERC-20 tokens through Pair's smart contract on the basis of V1.

Rust&Move:

Using Rust language to implement a web application back-end, mainly for the management of student and teacher information. Call the student and teacher information modules through the routing interface and interact with the PostgreSQL database to finally realize data storage, modification and query. Writing a simple blockchain in rust, implement common block structure and POW. In addition, use the Move language to implement a notepad demo, which has the function of adding, deleting, modifying and checking.

Zero-knowledge Proof

Imitating Dark Forest, using circom2 to implement a zero-knowledge proof circuit for a small space shooting game. Among them there are the following variables: the position of the aircraft (represented by 3D coordinates), the position of the machine gun, the distance of the firing, the direction of the positive and negative axis of the bullet (need to hide the information).

AI

Build an image algorithm platform. The Java side implements asynchronous message calls through RabbitMQ. After the Python side accepts the message, it calls the algorithm model and returns the result to the Java side. The Python side includes the following functions: Yolov5+CNN realizes verification code recognition; MTCNN+NIMA realizes image clarity and aesthetics scoring; ASL algorithm realizes image multi-label classification; CRNN+CTC realizes invoice recognition.

Skills

- IELTS 6.5, two years overseas study experience. Possessing good listening and reading skills and daily oral communication skills. Ability to work and live overseas.
- Understanding basic programming in Python, Solidity, Rust, Move, Java (in descending order of familiarity). In addition, understand the usage of common frameworks such as Ether.js, Truffle, Hardhat, React, Substrate, etc.
- Understanding common economics and finance-related concepts, and understand common Defi models (UniswapV2V3 exchange, Aave lending).
- Understanding common zero-knowledge proof algorithms and systems, including Groth16, Plonk, and Halo. In addition, understand the common circuit design language Cicom, Halo2.
- Familiar with common machine learning, deep learning algorithms(NLP, CV), understand the use and modification of common deep learning models.

Self-evaluation

- Strong learning ability and adaptability.
- Willing to communicate and collaborate with others, able to quickly integrate into the team.
- Atypical programmers, strong communication skills, extensive knowledge. Hope to grow rapidly in the sub-industry.

See the above projects for details in github: <https://github.com/lostpanda1992?tab=repositories>