

TONY ZHANG

tony@maapps.dev

www.maapps.dev

ABOUT ME

Ethereum DAPP/Smart Contract Developer, Solidity Assembly Engineer, Gas Optimizer, Security Maintainer, Blockchain-EVM Researcher

My real strength is my knowledge of Solidity and the ability to use Assembly, also my experience in researching and experimenting with hacking cases so far.

EXPERIENCE

maAPPs *2022/9 - Present*

Self-employed Smart Contract Engineer

- Developing Ethereum DAPP/Smart Contract
- Engineering Solidity Assembly
- Designing Efficient NFT Marketplaces
- Developing NFT Staking and Auction
- Developing Solana on-chain program
- Researching DeFi, AMM Protocols
- Optimizing Gas Usage
- Maintaining Security
- Implementing Proxy Contract
- Decentralizing Oracle
- Researching Blockchain, Ethereum, EVM

Rand Labs *2021/6 - 2022/8*

Algorand Smart Contract Engineer

- Implement Variable Interests Yield Farming Protocol on Algorand
- Implement AMM Protocol on Algorand
- Debug TEAL Programs
- Develop Incentivized Liquidation Process
- Design Cross-chain Collateral Protocol
- Implement Centralized Orderbook Exchange
- Improve Pyteal Library

SKILLS

- Solidity
- Solidity Assembly - Yul
- TEAL, Pyteal
- RUST
- C/C++
- ASM
- TypeScript

EDUCATION

Ethernaut *2020 - Present*

- Smart Contract Audit
- Re-entrancy Attack
- Front Running
- ERC20 Vulnerabilities
- Multi-sig Wallet Vulnerabilities
- DOS Attack
- Privacy Issues

CryptoZombies *2020*

- Ethereum Smart Contract Development
- Truffle Test & Deploy Tools
- Oracle Development

Solidity Doc *2018 - 2020*

- Solidity Programming Language
- Yul Programming Language
- Layout of State Variable
- Solidity Compiler
- Ethereum Virtual Machine

Parcel *2020/10 - 2021/5*

Senior Smart Contract Developer

- Develop ERC721 NFT Marketplace
- Implement Off-chain Order Matching
- Implement Asset Lazy Mint
- Integrate EIP712 Meta Transaction
- Designed Listable Asset Bundling Structure

Ondo Finance *2019/12 - 2020/9*

Smart Contract Engineer

- Develop Tranche based Short-term Farming Strategy
- Research New Liquidity Mining Incentive
- Implement On-chain Multi-protocol Aggregation Swap
- Develop JavaScript AMM Simulator
- Support Solidity Fuzz Test
- Solidity Vulnerability Experiments
- Integrate Hardhat Deploy
- Design DAO Simulation Scenario
- Implement Multi call Aggregator
- Implement Merkle Airdrop

Hyware Science and Technology *2015/8 - 2019/11*

Lead Developer

- Develop Smart Card Operating System kernel architecture
- Develop ECC crypto algorithm based on ARM ASM
- Implement Smart Card specified Java VM
- Write Java Card financial applications

**Beijing University of Posts and
Telecommunications** *2013 - 2015*

- Certificate Course in Software Engineering

Dalian University of Technology *2009 -
2012*

- B.SE in Information Technology