

Cheng JIANG

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Summary

- 6 years of experience in blockchain development and software development.
- Proficient in Ethereum Dapp and smart contract development, including Solidity, common design patterns, Gas optimisations, proxy mode and common attack methods.
- Deep knowledge of Zero Knowledge Proofs, Elliptic Curve, EVM, PoW/PoS consensus, cross chain technology and MPC.
- Skilled in traditional backend technical stack: HDFS, Redis, RocksDB, TiKV, Kafka, ClickHouse, Elasticsearch, Emqx, Spark.
- Familiar with the contract implementation of popular DeFi projects such as Uniswap, Lido, Aave, Seaport.
- Experienced in public chain development with Substrate and Cumulus.
- Proficient in Rust, Go, Webassembly, C++, CUDA, TypeScript, Solidity.
- Fluent in English, French and Mandarin.

Education

Université de Technologie de Troyes, Troyes, France

2017/08 - 2019/09

M.Eng in Networks and Telecommunication

Shanghai University, Shanghai, China

2013/08 - 2017/08

B.S in Computer Science

Experience

[ParaSpace](#), San Francisco, CA | remote - Blockchain Lead

2021/01 - present

- Co-led the development of the overall logical structure of DeFi products and worked closely with the founder to ensure alignment with the company's vision and goals.
- Led a team of 10+ blockchain engineers in completing the development of a polkadot parachain and an innovative DeFi protocol.
- Integrated polkadot's XCMP protocol and corporated with other parachain teams to set up HRMP channels.
- Implemented the crowdloan, LSD, DEX pallets and co-implemented the Money Market pallet.
- Designed the contract architecture of NFT lending, marketplace and BNPL, integrated with other marketplaces such as seaport, looksrare, x2y2.
- Worked with top auditing firms like ToB, Certik, SlowMist, Halborn to ensure the protocol security.
- Achieved 60k+ users and \$400M TVL in total.

[Ubudu](#), Paris, France - Senior Full Stack Engineer

2018/09 - 2021/01

- Led the development of Ubudu's RTLS (Real Time Location System).
- Designed and implemented a remote device management system for Acrelec.
- Built a covid social distancing analytics platform.
- Implemented a high performance zone geo fencing engine.
- Designed a visualization library called d3-vs and published to npm.
- Refactored the C++ real time positions server and map matching service.
- Deployed solutions for Acrelec, Orange, Schneider Electric, Amphenol, Huawei OpenLab.

Projects

[ParaSpace](#) - Maintainer

2022

- A decentralized cross-margin money market deployed on Ethereum mainnet.

[Parallel](#) - Maintainer

2021

- A decentralized lending & staking protocol built on top of the Polkadot ecosystem.

[Casbin-Rs](#) - Author

2019

- An authorization library that supports access control models like ACL, RBAC, ABAC.

Honors

• ISCAS and OpenEuler Summer of Code mentor	2020
• Google Summer of Code mentor	2019
• National Encouragement Scholarship	2014
• First Prize Scholarship of Shanghai University	2014
• Self-discipline Scholarship of Shanghai University	2014
• Creative Working Scholarship of Shanghai University	2014
• Third Prize in 24 hours Innovation Competition	2014
• Merit Student of Shanghai University	2014

Coursework

• UTT RE13	Corporate networks
• UTT SY22	Wireless Systems
• MIT 18.06	Linear Algebra
• MIT 6.828	Operating System
• MIT 6.824	Distributed Systems
• MIT 6.875	Cryptography
• MIT IAP	Modern Zero Knowledge Cryptography
• CMU 15213	Introduction to Computer Systems
• CMU 15418	Parallel Computer Architecture and Programming
• CMU 15445	Database Systems
• UCB 61B	Data structure, Algorithm
• UCB MOOC	Zero Knowledge Proofs
• Stanford 229	Machine Learning
• Stanford 230	Deep Learning

Research

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- Incrementally verifiable and private computation with ZK and MPC (Cryptography)
 - Derivatives, quant trading with machine learning (ML)
 - Parallel computing with software (Hadoop, Spark, Flink) and hardware (GPU/FPGA)
 - Secure blockchain scaling with data-availability sampling (DAS)
 - Programming language theory and virtual machine (PL, VM)

Skills

Programming Languages: Rust, Go, C++, CUDA, TypeScript, Solidity

Frameworks: Halo2, Plonky2, Artworks, eSTARK, Bellperson, Nova, Spartan, Circom, Actix-web, Actix, Tokio, Tonic, Diesel, Sqlx, OpenZeppelin, VueJs, ReactJs, D3, Leaflet

Tools: Redis, LevelDB, TiKV, Kafka, ClickHouse, Elasticsearch, Emqx, Spark, Docker, LXD

Platform: AWS, Cloudflare, Linux