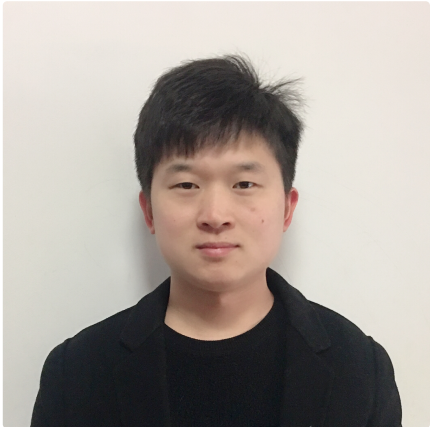


GoLang/Rust/Blockchain/Backend System R&D

[Switch Chinese](#)

Introduction

Name	Liu Yunlong (Adwind)
Photo	
Gender	Male
Age	32
Working Years	9
City	Beijing
Expected Salary (CNY/Month)	Negotiable
Expertise Fields	BlockChain/DevOps/web3/web2
Contact Number (WeChat Same)	18101120979
Email	overfor@icloud.com
WeChat Official Account	Micro Network World
Resume Preview	https://resume.adwind.cn/liuyunlong_en.html
Resume Download	https://resume.adwind.cn/liuyunlong_en.pdf
GitHub	https://github.com/AdwindOne

Technical Expertise

Blockchain Experience:

- Proficient in mainstream blockchain L1, L2, L3 technologies and web3 application ecosystems, advocating for public chain ecosystems and open-source communities
- Mastery of exchange custodial wallets and HD multi-chain wallet principles(e.g: DEX, Compound, MakerDAO, Chainlink, Axelar, MEV, etc.)
- Familiar with mainstream privacy computing technologies, such as SGX-based TEE platforms
- Familiar with smart contract development and contract auditing principles, with experience in designing and developing contract auditing services

Development & Operations:

- Expert in infrastructure/architecture development/ecosystem tool development/web application design
- Proficient in CI/CD DevOps and cloud-native ecosystems
- Long-term contributor to major open-source projects (e.g: go-eni/cosmos/evmos/solana/sei-chain/go-ethereum/bsc/fabric/chainmaker/fastosdocker, etc.)
- Familiar with mainstream database engines: MySQL/LevelDB/MongoDB/InfluxDB/Elasticsearch/ClickHouse, etc.
- Proficient in common code version control tools, IDEs, and AI productivity tools

Programming Languages:

- Proficient in Golang/Rust/PHP/Solidity; moderately used Java/C/C++/Python in projects; lightly used shell, JS, HTML, CSS, etc.
- Proficient in language frameworks, productivity tools, and OS: Mac/Windows/Linux

Hobbies

- Passionate about the tech industry, enjoys writing and reading excellent code, and upholds the open-source spirit.
- Pursues practicality, advocates the Geek spirit, and has an extreme love for the IT industry.
- Enthusiastic about new technologies and efficiency-enhancing tools, enjoys researching cybersecurity tools and source code.

Experience Summary

- Participated in the development of various blockchain underlying chains and ecological applications, such as the high-performance public chain go-eni, and Tencent's open-source blockchain platforms (ChainMaker and Zhixin Chain). Engaged in development and optimization of contract auditing, contract function design, virtual machine performance optimization, and web3 applications, holding multiple blockchain patents (e.g., CN202311429668.3, CN202311444296.1).

- Accumulated rich experience in blockchain, cloud-native transformation, system R&D, and platform construction across cloud computing, blockchain, and big data domains through projects in different companies.

Career Overview

Time (Reasons for Leaving)	Company Name	Position
2024.12 - Present	ENI Tech Team (remote)	Blockchain Core R&D Engineer (Golang/Python/Shell)
2023.10 - Present (Career Development)	Blockchain Technology Company	R&D Leader (Golang/Rust/Java/DevOps/)
2021.04 - 2023.10 (Career Development)	Tencent Computer System Co., Ltd.	Golang Backend R&D Engineer (C/C++/Rust)
2019.2 - 2021.4 (Career Development)	Beijing Kingsoft Cloud Network Technology Co., Ltd.	Golang Backend System R&D Engineer
2018.4 - 2019.2 (Influenced by Ethereum Price)	Beijing Qianligu Group (ShareX China Research Center)	Blockchain R&D/GO/PHP/Java
2017.4 - 2018.4 (P2P Compliance Risks)	Fast上线 (Beijing) Technology Co., Ltd.	GO/Blockchain/PHP
2016 - 2017.4 (Company Dissolution)	Beijing Honghuang Vision Technology Co., Ltd.	PHP Development
2014.7 - 2016.7 (Team Dissolution)	Luoyang Benniao Network Technology Co., Ltd. (Former Lazy Ant Studio)	PHP Development

Work Experience

ENI Tech Team

Blockchain Core R&D Engineer

2024.12 - Present (Golang/Rust/Python/Shell)

Participated in building the high-performance parallel execution public chain `go-eni (open-source)`, from underlying architecture design to EVM ecosystem compatibility, responsible for R&D and optimization of core modules, driving the chain system from 0 to 1.

Key Contributions & Achievements:

- Underlying Architecture Design & Modular Development:** Built the basic development framework and added core modules for the chain.

- **EVM Ecosystem Compatibility:** Implemented EVM module integration, completed compatibility adaptation with the Ethereum ecosystem, supporting deployment and testing of mainstream dApps and tools.
- **High-performance Parallel Execution Engine:** Participated in designing and optimizing the parallel transaction execution engine, including transaction grouping, conflict detection, sample DAG construction, and parallel scheduling strategies.
- **Consensus & System Contract Optimization:** Customized the consensus mechanism based on eni-cometbft, developed the epoch module, system contracts, and scheduling logic to enhance system stability and governance flexibility.
- **Performance Testing System Development:** Built the chain-level load testing module (`loadtest`), implementing key performance testing capabilities such as batch transaction stress testing and TPS analysis.
- **Third-party Security Audit Response:** Addressed external security audit reports, located and fixed multiple medium-high risk vulnerabilities to enhance overall system security.
- **Ecosystem Compatibility Research:** Conducted in-depth research on mainstream chains like BSC, Solana, Evmos, Ethermint, Sei, and Cosmos SDK, absorbing their performance optimization designs and verifying transformation feasibility.
- **Uniswap V4 Testing Support:** Completed deployment and testing of Uniswap V4 on the ENI chain, developed dedicated performance testing scripts to analyze operational overhead and interaction performance.
- **Axelar Cross-chain Bridge Integration:** Completed technical research and deployment testing of the Axelar cross-chain bridge, laying the foundation for inter-chain interoperability.
- **Python Automation Testing Development:** Maintained and expanded the Python testing framework, designed high-coverage test cases to support continuous integration and pre-release regression testing.
- **Code Quality Assurance:** Supplemented unit tests for key modules, covering core logic paths to ensure the correctness of the parallel engine and transaction modules.
- **10000TPS Performance Testing Support:** Developed efficient offline signature tools and batch account generation scripts, constructed large-scale test accounts and pre-signed transaction data to support high-concurrency transaction injection and chain-level stress testing.
- **Multi-node Environment Construction:** Completed the setup, deployment, and optimization of a stable multi-node chain environment, supporting functional testing and performance verification under different scenarios to ensure long-term stable operation.
- **ZK-EVM Technical Research:** Focused on analyzing zkRollup architecture, ZK-SNARK/STARK principles, EVM compatibility layer implementation, and supporting toolchains (circuit generation, prover optimization, Verifier contracts), providing technical reserves for subsequent on-chain privacy computing and scalability optimization.
- **AI Application Development:** Implemented an LLM Agent framework using `LangChainGo`, integrating embedding models, vector databases, prompt templates, and multi-tool chains to develop intelligent applications with **chain calling**, **context memory**, and **plugin extension capabilities**.
- **MCP Server Development:** Responsible for developing the **MCP Server** backend, completing modules such as model management, call routing, and task scheduling,

to build a stable and efficient backend support system for unified AI model invocation.

Blockchain Technology Company

2023.10 - Present R&D Leader (Golang/Java/DevOps)

Participated in R&D of blockchain, evidence storage, NFT,确权 platforms, data element platforms, cross-chain services, and privacy technology platforms (main languages: GO/Rust/Java); conducted cloud-native transformation for blockchain underlying chains/public cloud services/blockchain BaaS platforms/NFT/evidence storage platforms, etc.

- Developed blockchain underlying chains, constructed BaaS platforms, and carried out containerized cloud-native transformation of underlying chains.
 - Responsible for the container cloud management platform based on K8S+Rancher, achieving unified management of k8s container clusters.
 - Completed full-link CI/CD configuration integration of gitlab, jenkins, harbor, charts, helm, rancher, and k8s.
 - Wrote jenkinsfile and dockerfile for service containerization, ensuring adaptability with private image repositories and Charts repositories.
 - Participated in developing evidence storage API versions and transforming NFT digital collection platforms, responsible for devops containerization adaptation.
 - Led the R&D of OIDC unified login services and data element public service platforms.
 - Developed Cosmos-based bounty platforms, researched the underlying technical principles of Polkadot Substrate, and practiced various cross-chain solutions.
 - Participated in research on OPStack-based projects, familiar with OPStack architecture and technical principles.
 - Led the R&D of the 确权 platform, including developing the certificate verification center based on the data element chain and constructing the training platform.
 - Designed and developed cross-chain services to connect copyright chains, responsible for building the traceability system and formulating data asset account solutions.
 - Engaged in constructing data element platforms, researching可信 data space technical solutions, and building privacy computing solutions and platforms.
-

Tencent Computer System Co., Ltd.

2021.04 - 2023.10 Golang Backend R&D Engineer (Go/Rust/C/C++)

- Participated in projects: Tencent's open-source blockchain platforms ChainMaker (Chang'an Chain) and Zhixin Chain.
- Blockchain patents: CN202311429668.3; CN202311444296.1.
- **Chang'an Chain Underlying Development:**

- Designed and developed privacy computing (TEE) underlying system contract functions, Gateway, SGX service certificate authentication, and permission services in sandbox environments.
- Designed and developed the underlying account system for Zhixin Chain.
- Designed and developed a unified Gas deduction solution for multi-virtual machines.
- Designed and developed the Docker-Go virtual machine Gas charging solution.
- Optimized Docker-Go virtual machine performance, designed and developed StoreMap.
- Optimized Docker-Go virtual machine performance by merging partial read sets to support batch status data acquisition.
- Researched TinyGo compiler, packaged and released images, developed TinyGO smart contract SDK, and maintained the compiled image environment.
- Developed the contract virtual machine Gasm and supported iterative development of the Tbase version Gasm virtual machine.
- Designed and developed the Openpocket internal application SBT protocol contract, and developed partial application interfaces for Openpocket.
- Designed and developed smart contract vulnerability auditing services.
- **Blockchain Application Development:**
 - Designed and developed the Yuanzi Box project for the Phantom Core project on Zhixin Chain.
 - Developed and optimized partial functions of the Tencent Digital Collection Hall on Zhixin Chain.
 - Designed and developed the data pulling service for Zhixin Chain switching to Chang'an Chain.
 - Iteratively developed and optimized the Zhixin Chain block browser synchronization service.
 - Designed and developed contract auditing supporting Solidity/Rust/Go languages, basically supporting GO contract auditing.
- **Cloud-native Practice & Big Data Dashboard Construction:**
 - Configured Tencent Cloud's self-developed CI/CD and TKE (k8s) testing/production environments for Zhixin Chain services.
 - Constructed the Zhixin Chain operation big data dashboard, involving云梯 cloud services US/DB-Sync/HDFS/Oceanus (Flink)/ClickHouse/Datataalk.
 - Connected Tbase Tencent Cloud Blockchain Ankr RPC services.

Beijing Kingsoft Cloud Network Technology Co., Ltd.

2019.2 - 2021.4 Golang Backend System R&D Engineer

Participated Projects:

- Enterprise cloud operation and maintenance platform: asset management, model management, business tree, service function tree, log services, unified permission management, automated operations, process engine, CI/CD, monitoring system, etc.

- **CMDB asset management:** Developed in Golang, supporting unified asset operations, multi-subsystem permission control, multi-dimensional custom asset display/operations, multi-dimensional data relationship display/operations, multi-dimensional permission control, and multi-functional OpenApi.
- **Model management:** Designed and developed configuration interfaces for asset model attributes, relationships, extended fields, relationship groups, views, sorting, quick operations, sharing, and permission configuration.
- **Business tree:** Developed in Golang, automatically generating various service trees, business trees, function trees, permission inheritance configurations, and product line asset management through configuration.
- **Monitoring services:** Developed in Golang, including HBS heartbeat server, central control service middleware, researched and customized Prometheus core code, and assisted in connecting the monitoring system to the platform.
- **Automated operations:** Developed in Golang, connecting process engines, tools, workers, operations, and tasks to the platform.
- **Expression engine:** Developed in Golang, researching expression engines and connecting them to the platform for customized asset verification and operations.

Achievements:

1. Completed development and launch of the Golang-based kops operation and maintenance platform for microservices.
2. Completed R&D of the jumpserver out-of-band management service.
3. Completed customized transformation of Prometheus and R&D of the monitoring system middleware heartbeat server.
4. Completed R&D of the Netconf network configuration management platform and middle-stage service integration.
5. Completed R&D of the server cluster task distribution management system.

Microservice Practices:

- Developed in Golang, using go-micro microservice framework, restful/rpc interface style, mongodb/mysql/es for storage, consul/etcd for service registration/discovery, nsq/nats for message queues, grpc/rpc/http for transmission protocols, protobuf for data structure protocols, and optimized microservice architecture with middleware development.

Beijing Qianligu Group (ShareX China Research Center)

2018.4 - 2019.2 Blockchain R&D/GO/PHP/Java

Project Experience:

- **Sharex Crypto Trading** : Development environment Mac/Linux, language: **Golang** wallet, added ETH, BTC, ERC20 token (omni-USDT) deposit monitoring, middleware encapsulation, and node deployment configuration.
- **Sharex Equity Exchange** : Language: Golang, framework: Beego, **refactored digital currency wallet middleware**, adjusted architecture planning (fully Golang version).
- **Exchange Data Api** : Developed in Golang, connecting Huobi, OKCoin, and Binance

as service middleware.

- **Smart Contracts** : Developed in Golang, created Sharex data on-chain smart contracts relying on Fabric environment GO-SDK.
 - **Data Crawler** : Developed in Golang, distributed multi-task crawler for Douban, using Elasticsearch database.
 - **Sharex Blockchain Platform** : Development environment Linux (centos7/ubuntu 16.4)/mac/Alibaba Cloud container services, language Java, deployed Ethereum, Fabric, Bitcoin, Eos environments, configured nodes, security policies, and encapsulated API interfaces.
 - **Coin Competition 2** : Development environment mac/Remix-ide (local deployment), language Solidity, wrote/tested/deployed token contracts, and guided Android wallet development.
 - **Sharex Wallet 0.5 Version** : Designed ETH and Sxw wallets, providing technical guidance for development.
 - **Sharex Cross-chain Wallet 1.0 Version** : Development environment mac, language Java, enabled Token conversion between public chain Ethereum and alliance chain Fabric.
 - **Sharex Equity Management System** : Development environment mac/centos7, language Java, built ipfs nodes, optimized wallet withdrawal functions and deposit monitoring.
 - **SuperEX Exchange** : Designed and developed wallet components, deployed nodes.
 - **Airdrop Token System** : Development environment MAMP, framework Laravel, language PHP.
 - **Other Tasks** : Wrote and deployed token lock-up contracts for listing on Huobi, Tiantian Exchange, etc., and docked smart contract security audits (Zhidao Chuangyu/Mangwu Technology).
-

Fast Online (Beijing) Technology Co., Ltd.

2017.4 - 2018.4 GO/Blockchain/PHP

Project Experience:

- Blockchain researcher: Early research on Hyperledger, mainly building nodes, deploying simple smart contracts, and studying deployment script configurations (fabric0.6); later researched Ethereum (contract deployment, ERC20 contract development/writing/deployment), wallets, Bitcoin, and other mainstream blockchain technologies, regularly conducting technical sharing and salon activities.
- Blog: Developed in Golang, using beego framework, Mysql database, rewritten from the previous PHP version.
- Log monitoring: Developed in Golang, front-end monitoring panel Grafana, InfluxDB database.
- Financial live broadcast: Developed in PHP, framework ThinkPHP, with iOS/Android clients, server interfaces, and background management.
- Earn a Car (Mini Program): Framework Phalcon, recommending to earn car coins, with background management.
- Zhongpu Jinfu (in operation): Framework CI, background management system, P2P

platform.

- Zhongpu Coin Wallet: Developed in nodejs, framework truffle, Ethereum, solidity, virtual currency.
 - Fuli Coin Wallet (Ethereum-based, downloadable from Appstore): Ethereum, truffle, solidity, ThinkPHP, distributing virtual currency as benefits.
 - Online Signing (in operation): Framework Phalcon, online signing system for Zhongpu Jinfu, with iOS/Android clients.
 - Coin Crowdfunding: ICO crowdfunding platform built based on PHP open-source project Wordpress.
-

Beijing Honghuang Vision Technology Co., Ltd.

2016 - 2017.4 PHP Backend R&D

Project Experience: Xiupai Live Broadcast

Development language: PHP

Development framework: ThinkPHP

Project description: A competitor to live broadcast systems like Huajiao and Yingke, with iOS/Android clients, server interfaces, and background management.

Responsibilities:

- Independently developed various API functions for the APP, encapsulated third-party payments and logins, and developed Qiniu live cloud including live connection functions.
 - Optimized Mysql database, and optimized/developed Redis storage for real-time online user counts and live connection requests in live rooms.
 - Developed background function modules, built the LAMP environment, and deployed/maintained server-side projects.
-

Luoyang Benniao Network Technology Co., Ltd. (Former Lazy Ant Studio)

2014.7 - 2016.7 PHP

Project Name: Sangguoer Official Website Revamp & Advertising Delivery System

Project description: In the early days of Sangguoer, developed basic WeChat official account functions for the official website, and conducted secondary development of the advertising delivery system (Shandong client).

Responsibilities:

- Developed basic functions for the official website WeChat official account.
- Revamped the project and optimized modules of the advertising delivery system.

Project Name: Online Fruits & Vegetables (imitating Meiri Youxian app)

Project description: An online mall for fruits and vegetables, with Android/iOS clients and a WeChat mini-mall ordering system, finalized as online retail of fruits and vegetables.

Responsibilities:

- Developed App interfaces, third-party OAuth2.0 certifications (WeChat, QQ, Weibo, etc.), and payments (WeChat Pay, Alipay, third-party SDK payments).
- Conducted secondary development of Ecshop, maintained website operations, and developed WeChat official accounts.
- Optimized the database, applied Redis caching, configured the server under Alibaba Cloud ECS, used version control tools (svn, git), and configured Nginx load balancing for high concurrency resistance.
- Qingyang Capital Studio: Responsible for writing Tongdaxin software indicators, stock selection indicators, and documents.

Self-Evaluation

- **Technical Competence:** Strong theoretical foundation in programming, strong logical analysis skills, excellent document summarization and writing abilities, practical experience in analyzing code efficiency/bottlenecks and optimizing performance, certain capabilities in data structure and architecture design, proficiency in project interface security analysis, skilled in using common tool shortcuts, strong logical thinking and new knowledge acceptance ability, with a spirit of continuous innovation and exploration, and good communication/collaboration skills for quick adaptation to new environments.
- **Team Collaboration:** Cheerful personality, good communication and coordination skills, strong curiosity and career ambition, with team spirit.
- **Professional Quality:** High sense of responsibility and strong career ambition, pursuit of practicality, advocating the Geek spirit, love for the IT industry, good self-learning ability and self-drive, passion for technology and code, enjoys reading excellent open-source project code, pays attention to code readability/coupling/extensibility, etc., with great enthusiasm for new technologies and efficiency-enhancing tools, and full confidence in the IT industry's prospects.

Education

2010 - 2014 Henan University of Urban Construction Bachelor (Full-time)
Computer Science and Technology

- Computer Room Administrator, Deputy Minister of Sports, Team Leader of ACM Competition, School of Computer Science and Engineering

liuyunlong