

Marshall Wang

Senior Full-Stack Engineer

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Location: China (UTC+8) | Open to Remote / Relocation

Summary

- Senior full-stack engineer with 5+ years building and shipping production systems end-to-end —from data model and APIs to frontend and deployment.
- Recently core engineer on an AI-agent-economy **payments platform**: built a double-entry ledger, an **MCP agent-token layer**, real payment/chargeback flows, and production security hardening, then shipped it to Kubernetes.
- Strong backend foundation in Java/Spring (high-concurrency inventory, messaging, data pipelines); fluent across TypeScript, Rust, and Python, and with LLM/agent tooling (MCP, OpenRouter, RAG, function calling).

Skills

Languages

TypeScript Java Rust Python SQL C#

Backend & APIs

Node.js Bun Hono Spring Boot Spring Cloud REST WebSocket SSE RBAC / Audit

AI & Agents

Model Context Protocol (MCP) LLM Orchestration OpenRouter Vercel AI SDK RAG Function Calling
Prompt Design

Data & Messaging

PostgreSQL YugabyteDB MySQL Redis Dragonfly Drizzle ORM RabbitMQ

Frontend

Solid.js React Next.js Tailwind CSS PWA Canvas

DevOps & Infra

Docker Kubernetes (k3s) ArgoCD GitOps CI/CD Nginx Linux Observability

Domain

Payments Digital Wallets Double-Entry Ledger App Security JWT / 2FA

Experience

developerz.ai *Senior Full-Stack Engineer (Remote)*

May 2026 – Present

- Core engineer building AI-agent-economy payments infrastructure end-to-end across TypeScript, Rust, and Python —from data model and APIs to frontend and production deployment.
- Shipped **ggcoin.ai**, a closed-loop digital-currency wallet & payments platform, and **autonomous coding-agent orchestrators** published to npm & PyPI (see Selected Projects for detail).
- Rolled out the platform to Kubernetes via ArgoCD GitOps, with per-service availability alerting and centralized error monitoring; contributed CI and docs to a self-hosted Rust MCP database gateway.

Shanghai Yuanhuan Information Technology Co., Ltd. *Senior Backend Engineer*

Aug 2022 – Apr 2026

- Owned core REST APIs for procurement, sales, warehouse, and finance modules across requirements review, design, release, and production troubleshooting.
- Built asynchronous workflows on a RabbitMQ event bus + Redis caching to stabilize high-concurrency inventory deduction and support async restocking / state write-backs.
- Implemented Excel/CSV batch import with validation, precise error localization, and transactional rollback; set up inventory/funds monitoring and alerting to cut incident response time.

China Aerospace Science & Industry Corporation (CASIC) *Backend Engineer*

Jul 2021 – Oct 2021

- Integrated ArcGIS + Cesium for 2D/3D terrain and model visualization in a real-time simulation system; designed WebSocket channels for “launch-to-impact” animation and state sync, and packaged reusable map-interaction SDK utilities.

Beijing Kechuang Baigu Information Technology Co., Ltd. *Full-Stack Engineer (Intern)*

Apr 2021 – Jul 2021

- Delivered features and bug fixes for internal web systems; documented integration and delivery notes to improve team collaboration.

Selected Projects

ggcoin.ai —Digital-Currency Wallet & Payments Platform *Core Engineer, developerz.ai*

May 2026 – Present

- A closed-loop payments platform for gaming, AI, and the agent economy; owned from the ledger core to production deployment.
- Built a **double-entry ledger engine** (posting, reversal, balance derivation, cross-account entries) with a master/sub-wallet model, a treasury issuance account, and a reconciliation job auditing balances against ledger sums.
- Designed the **MCP agent-token layer** that lets AI agents mint, hold, and spend value through scoped sub-wallet tokens —with cascading revocation, per-wallet caps, and per-mint replay nonces.

- Integrated **real payments** (CCBill + redundant crypto-processor adapters, hosted checkout) and a chargeback path that freezes wallets, reverses buys, and burns coin back to treasury under closed-loop compliance guards.
- Hardened for production: JWT + TOTP 2FA, self-serve API keys, rate limiting and lockout, per-account quotas, money-overflow guards, and SSRF-defended HMAC-signed webhooks; realtime wallet sync over SSE + WebSockets on Dragonfly.
- Delivered the **full frontend** —web wallet, admin console, dashboard, and marketing site —migrating all four apps to Solid.js (SolidStart SSR), plus a self-serve developer portal and public docs.

ai-task-master / claude-task-master —Autonomous Orchestrators *Core Contributor · npm & PyPI* 2026

- A Planner/Worker/Reviewer loop on the Vercel AI SDK + OpenRouter that turns a goal into merged PRs (TypeScript + Python).
- Built a Claude-Code compatibility layer and **provider-agnostic structured output** that unblocks non-Claude models; added crash recovery, git-safety guardrails, and one-command provider profiles.

Zhejiang Lab – 8th Anniversary Online Event Website *Full-Stack Contractor (Independent Delivery)* Jun 2025 – Dec 2025

- Independently owned the full lifecycle (requirements → development → deployment → acceptance → production support) under corporate invoicing.
- Delivered the end-to-end flow: quiz interaction → message submission → personalized certificate generation/preview → export/download, with client-side Canvas rendering, mobile compatibility, and an iOS Safari “preview & save” fallback.
- Built a thin backend for metadata persistence, validation, dedup, query, and export, plus an admin console for certificate management and quiz statistics.

Procurement & Sales ERP System (Songhesheng) *Backend Developer (Core Modules)* Nov 2024 – Apr 2026

- Developed core modules (SKU, warehouse, procurement, sales, finance) and REST APIs for document workflows and business validation; applied RabbitMQ + Redis for async processing and peak shaving on inventory deduction and replenishment.

Collectibles Shared-Warehouse Platform *Backend Developer (Distributed & Multi-Client)* Nov 2023 – Sep 2024

- Built Spring Cloud microservices for mini-program, app, and admin (excluding payments), covering listing, review, dedup, and recommendation; implemented image fingerprinting + text-similarity checks for real-time deduplication.

Toyota Forklift “Elite Club” Website / OSG OA System *Maintenance & Backend Developer* 2022 – 2024

- Maintained a legacy C#/.NET codebase (captcha login, access control, audit logging); designed employee-department-report modules and an Excel import/export engine with validation.

Education

Henan University of Science and Technology *B.Eng. in Computer Science (Part-time / Distance Learning)* Mar 2023 – Jul 2025

Luoyang Vocational College of Science and Technology *Associate Degree in Software Technology* Jul 2017 – Jul 2022

- Honors: Outstanding Graduate (Henan Province, 2022); National 3rd Prize, Team Programming Ladder Competition; Henan Provincial Champion.

Coursework & Labs (UC Riverside, Self-Study)

- CS153 Operating Systems: xv6 kernel labs (scheduling, virtual memory, file system). CS152 Compiler Project (Rust): lexer, LR parser, three-address IR.
- CS170 AI & CS172 NLP: A*/CSP/Q-learning; word2vec + RNN sentiment classifier with evaluation. CS236 Database Systems: ER modeling, SQL parsing, basic optimization.