SOFTWARE ENGINEER

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SUMMARY

- **Global User Growth & Incentive Platform**: Built from 0 to 1, supporting tens of millions of DAU and million-level peak QPS, ensuring zero downtime and zero financial loss.
- **Global Site Refactoring & SEO**: Upgraded promotional site to immersive short video PWA, achieving billion-level page indexing via SSR/SEO, significantly increasing Web DAU.
- **AI Companion App**: R&D Lead, designed 5-layer emotional interaction architecture and long-term memory/emotional recall, delivering high-fidelity real-time voice experience.
- **Smart Growth Experiment Copilot**: Tech Initiator, Agentic Workflow + MCP + RAG loop, improved experiment analysis efficiency by 5x, covering 60% of complex tuning scenarios.

EXPERIENCE

Tech Giant, Global – User Growth	Oct. 2020 – Present
Internet Portal Company, Real Estate Division	Jul. 2019 – Oct. 2020
BFU, Software Engineering – Master	Sep. 2017 – Jul. 2019
BFU, Computer Science – Bachelor	Sep. 2013 – Jul. 2017

PROJECTS

AI-Assisted Parameter Tuning Copilot   Nov. 2025 – Present

- **Agentic Reshaping**: Reshaped AB experiment configuration and analysis pipeline; adopted Workflow+Agent architecture, MCP toolchain with code interpreter, and RAG loop, covering complex UG tuning scenarios, improving analysis efficiency by 5x.
- **Toolchain Integration**: Encapsulated internal tools (AB platform, config center) as MCP based on Deep-Agents framework, integrated code kiwi tools, enabling complex parameter understanding and visual report generation, improving analysis efficiency by 5x.
- **RAG Loop & Infrastructure**: Designed "Analysis Result Offline Feedback" mechanism to sediment Agent's high-value analysis into domain knowledge; built UG-specific knowledge base using LlamaIndex, introduced Query Rewrite and multi-route recall strategies, significantly improving attribution accuracy. This RAG system is now promoted as a general infrastructure for global business.

AI Companion App (Brazil Market)   Oct. 2024 – Dec. 2025

- **5-Layer Interaction Architecture**: Led core interaction and algorithm implementation; designed "Safety Fence - Persona Prompt - Emotion Recognition - Memory Retrieval - Response Generation" 5-layer architecture, ensuring safety and OOC control, optimizing TTFT for high-fidelity real-time voice experience.
- **Long-term Memory & Emotional Recall**: Built vector database-based long-term memory system, pioneered multi-emotional scene recall algorithm, dynamically retrieving highly relevant historical memory fragments based on user's current emotion, strengthening user-Bot emotional connection.
- **AIGC Growth Loop**: Built UGC character creation workflow and AI Push copy horse-racing system, utilizing AIGC to automatically generate persona images/videos and recall copy, significantly improving user creation activity and platform retention.

Global Site Refactoring & SEO System Construction   Sep. 2023 – Dec. 2024

- **PWA+SEO from 0 to 1**: Led upgrade of promotional site to immersive short video PWA and built SEO system from scratch; introduced Service Worker+App Shell and SSR, achieving billion-level page indexing and significant Web DAU growth.
- **SEO Architecture from 0 to 1**: Built SSR server-side rendering cluster for new PWA architecture, solving SPA crawler indexing challenges; designed dynamic routing and metadata management system, ensuring billion-level Video Detail Pages are efficiently indexed by Google.
- **Engineering System from 0 to 1**: Built SEO automation platform from scratch, realizing closed-loop Sitemap automatic push, dead link inspection, and Crawl Budget monitoring; designed dynamic internal linking strategy and spider pool system, maximizing site weight and improving long-tail keyword rankings.
- **Content Aggregation System**: Built automated content production pipeline based on keyword extraction and tag clustering, mining high-quality internal content to generate tens of millions of Topic aggregation pages and

Q&A pages, covering massive long-tail search terms at low cost and significantly improving traffic acquisition efficiency.

Global User Growth Incentive Platform   Oct. 2020 – Jun. 2023

- **Platform from 0 to 1**: Built overseas incentive platform from scratch, supporting tens of millions of DAU; adopted Redis pre-deduction + RocketMQ asynchronous peak shaving + sharding architecture, with peak QPS exceeding one million, shortening campaign launch cycle from weeks to days, ensuring zero downtime and zero financial loss.
- **Incentive Gameplay Platformization**: Led component-based refactoring of task center and viral gameplay, built rule engine-based activity configuration platform, supporting minute-level orchestration and launch of "Check-in/Bargain/Group-buying" gameplay, shortening R&D delivery cycle from weeks to days.

Skills

- Proficient in Java, Concurrency Models; Proficient in Python; Capable of Frontend Development.
- Proficient in MySQL, Redis, Kafka, ElasticSearch, etc.; Proficient in Hive, ClickHouse for big data processing.
- Experience in designing and implementing high-concurrency, high-availability incentive systems.
- Mastery of LangGraph, DeepAgents, LlamaIndex and other open-source AI frameworks; Deep understanding of Agent design patterns, Context Management, RAG construction.
- Understanding of Transformer model principles.