

AUGUSTIN CHAN

TECHNOLOGY LEADER | SOFTWARE ARCHITECT

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PROFESSIONAL SUMMARY

Senior technology professional with over 20 years of experience spanning software architecture, development, consulting, and technical leadership in demanding enterprise environments. Demonstrated expertise in Master Data Management (MDM), performance optimization, and solving complex technical challenges for global customers. Currently leveraging deep technical expertise as CTO of Digital Rain Studios, driving innovation in AI-powered applications and Web3 integration, including the award-winning 8-Bit Oracle project. Passionate problem-solver adept at bridging the gap between established enterprise systems and cutting-edge technologies.

TECHNICAL SKILLS

AI/ML	LLM Integration (Claude API), DSPy Framework & Structured AI Workflows, Multi-Agent AI Orchestration, Prompt Engineering, RAG Frameworks (Llamaindex, Haystack), Research Automation, Advanced Content Generation Pipelines, Streaming AI Responses
Web Development	React, Next.js (App Router, RSC), Tailwind CSS, shadcn/ui, JavaScript/TypeScript, HTML, CSS, next-intl (i18n), Vitest
Backend	FastAPI, Python, Java, SQL, PL/SQL, API Standardization, Database Migrations (Alembic)
Databases & Data	PostgreSQL (Supabase), Oracle, MS SQL Server, Elasticsearch, MDM (Informatica/Siperian), Data Modeling, Fuzzy Matching, Caching (Redis/Infinispan)
Web3 & Blockchain	Solana, EVM Chains, NFT Access Control, Wallet Integration, Cryptographically Secure RNG (Web Crypto API)
Platforms & Tools	Supabase, Vercel (Edge Functions), Docker, Git, pytest, JMeter, VMWare
Concepts	Full-Stack Development, Real-Time Systems (WebSockets), Performance Tuning & Profiling, Distributed Systems, Technical Architecture, Pre-Sales Engineering

PROFESSIONAL EXPERIENCE

CTO, Digital Rain Studios <i>Hong Kong</i> Spearheading the development of innovative AI-enabled experiences combined with Web3 gamification and autonomous content intelligence systems.	Nov 2023 - Present
<u>ContentMind</u> / QDayAnon — Autonomous Content Intelligence Engine (2024-2025) First production release built in ~10 weeks <ul style="list-style-type: none">Built Production-Ready Monorepo Architecture: Full-stack platform using Next.js 15 (App Router, RSC), FastAPI backend, PostgreSQL, with real-time WebSocket communication and standardized API responses	

- Engineered Advanced AI Workflow Orchestration: DSPy framework integration with structured AI signatures, multi-agent workflow systems, and intelligent content generation pipelines
- Developed Research Automation Engine: Academic paper integration (Semantic Scholar API), automated citation management, intelligent source deduplication, and Whisper transcription
- Implemented Real-Time Intelligence System: WebSocket-based live updates, timeline management, automated intelligence briefing generation with comprehensive testing framework (pytest, Vitest)
- End-to-end architecture for structured, explainable AI output with autonomous publishing via rate-limit-aware scheduling

8-Bit Oracle — AI-Enhanced Divination Platform

- Engineered Core Platform: Next.js 14 (App Router, RSC), React, Tailwind CSS, shadcn/ui, Zustand, Supabase (Auth/PostgreSQL), deployed on Vercel Edge Functions
- Developed Advanced AI System: Sophisticated prompt engineering for Claude API with custom XML tagging, streaming responses, and token monitoring
- Built Cryptographically Secure Divination: Mathematically faithful yarrow stalk simulation using Web Crypto API, validated via 1M+ iterations
- Integrated Web3 Capabilities: Token-gated features, multi-chain wallet connections (EVM/Solana), NFT-based access control
- Open-sourced deterministic core as [seeded-iching-engine](#)

Other Projects

- **NFTer** (open source): Move smart contracts on Sui for AI-generated NFTs, Walrus decentralized storage
- **Pix** (Consensus HK 2025 Winner): Autonomous Twitter agent with I-Ching divinations + OriginTrail DKG integration

Recognition & Speaking

- **Consensus HK Hackathon Winner** (Feb 2025) — [Featured by CoinDesk](#)
- Speaker at Taipei Blockchain Week (Dec 2024)
- Panel: [WOW Summit "Top Down Bottom Up"](#) | Demo: [AI+Power HK](#)
- Interviews: [Full Value Dan](#) | [Eddy Live](#)
- Collaborations with OriginTrail and Bonsol (Q1 2025)

Development Architect, Informatica

Aug 2011 - Nov 2023

Hong Kong

Development Architect, MDM (Jun 2015 - Nov 2023)

- Key contributor to Informatica MDM product codebase since 2018
- Architected major performance enhancements to MDM fuzzy match engine, achieving up to **200% improvement** via linear scaling across servers/threads using distributed caching (Infinispan) and hotspot management
- Refactored core matching components for multi-threaded, distributed batch jobs spanning multiple nodes
- Provided global architectural guidance, design reviews, and critical issue resolution for top-tier MDM customers worldwide

Technical Delivery Manager - MDM (Sep 2014 - Jun 2015)

- Managed technical delivery aspects for MDM projects

Senior Consultant - MDM and Data Quality (Aug 2011 - Sep 2014)

- Led design, development, deployment, and testing for Informatica MDM solutions, including the first MDM customer implementation in Asia Pacific Region (2011)
- Specialized in Siperian MDM: requirements gathering, data modeling, match/merge tuning (including Chinese Fuzzy Search), trust/survivorship rules
- Successfully delivered MDM projects for major airline, insurance company, and quasi-governmental agency

Consultant, Dun & Bradstreet (via acquisition of Purisma)

Jul 2006 - Aug 2011

Hong Kong & Redwood City, CA

- **Senior Consultant - Advanced Solutions (MDM)** (Feb 2009 - Aug 2011): Remote consulting for hosted MDM customers and expert troubleshooting support
- **MDM Appliance Deployments** (Dec 2007 - Jan 2009): Established processes for MDM software appliances using VMWare
- **MDM Sr. Pre-Sales Engineer (Purisma)** (Jul 2006 - Dec 2007): Pre-sales technical expertise contributing to company growth before D&B acquisition

Prior Experience

1996 - 2006

Roles at Blackstone Technology Group, Vitria Technology, WorldChain, Sybase, and Prolifics/JYACC. Experience in EAI, Java/C++, CRM integration, database technologies, pre-sales, and technical support.

EDUCATION

B.S. Cognitive Science with Specialization in Computation

1996

University of California, San Diego (UCSD)