

# STOYAN DIMITROV

## Staff AI & Protocol Architect | Engineering Leader | Distributed Systems

USA (Remote) | [linkedin.com/in/stoyand](https://www.linkedin.com/in/stoyand) | [github.com/StoyanD](https://github.com/StoyanD)

### EXECUTIVE SUMMARY

Strategic Engineering Leader with 14+ years of experience architecting high-value distributed systems across Generative AI, Blockchain, and Mobile infrastructure. Expert in bridging the gap between cutting-edge LLMs and scalable user products. Proven track record of building autonomous browser agents and multi-chain ecosystems securing \$600M+ in TVL. Passionate about solving hard interoperability problems while driving engineering culture and operational excellence.

### CORE COMPETENCIES

AI Engineering	Generative AI (Google Vertex AI, Gemini), RAG Pipelines, Prompt Engineering, Web Intelligence (Crawl4AI), Context Extraction.
Blockchain	Ethereum & EVM (Optimism, Base, Arbitrum, Polygon), Solana, Cross-Chain Bridging, Account Abstraction (ERC-4337), Smart Contract Security (Foundry, Hardhat).
Leadership	System Design, Protocol Architecture, Hiring & Mentorship, Technical Strategy, OpenSpec (Doc-driven dev).
Stack	Python (FastAPI, Pydantic), TypeScript/Node.js, Go, Rust (Cosmos-SDK), Solidity, Java/Kotlin/Swift.
Infrastructure	Google Cloud (Cloud Run, Vertex AI), AWS, Kubernetes, Docker, CI/CD (GitHub Actions), Firebase.

### PROFESSIONAL EXPERIENCE

Independent Builder

Nov 2025 – Present

**Independent AI Architect / Lead Developer**

*Building high-performance autonomous agents and intelligent content extraction systems.*

- Intelligent Content Pipeline: Architected a full-stack AI service using FastAPI and Vertex AI to transform raw web data into structured knowledge. Integrated Gemini for real-time summarization and semantic tagging.
- Agentic Browser Extension: Developed a React-based Chrome Extension that leverages background workers and Firebase-authenticated side panels to provide contextual AI assistance

directly in the browser.

- **Automated Data Ingestion:** Engineered a robust scraper-to-LLM pipeline using Crawl4AI with pruning strategies, reducing token consumption by 60% while maintaining context fidelity for RAG applications.
- **Architecture & Standards:** Implemented OpenSpec for documentation-driven development in a pnpm monorepo, ensuring rigorous API contracts and system alignment across Python and TypeScript services.

**Eco Inc.** (Remote)

Mar 2018 – Nov 2025

***Staff Blockchain Engineer (Founding Engineer)***

*A fintech and blockchain protocol company focused on stablecoin infrastructure for an entirely new economy.*

- **Eco-Solver Infrastructure:** Architected and led the development of a cross-chain solver system coordinating transaction fulfillment across 34+ EVM networks and Solana. System currently secures **\$600M+ in TVL**.
- **Engineering Culture & Hiring:** Built the web3 engineering vertical from the ground up. Designed the technical interview rubric and led hiring for frontend, backend, and Solidity roles.
- **Cross-Chain Liquidity:** Designed the *Eco-Routes* intent routing protocol, creating a unified liquidity layer for bridging assets between L2s (Optimism, Base, Mantle).
- **Infrastructure Scaling:** Built *Routes-Rindexer*, a high-performance off-chain event indexer (NestJS/Redis/Postgres) to handle massive scale data aggregation for on-chain events.
- **Account Abstraction:** Pioneered early adoption of ERC-4337, creating a novel "2D Nonce" utility to optimize multi-dimensional transaction encoding.

**Independent Consultant** San Francisco, CA

Aug 2017 – Mar 2018

***Blockchain & Mobile Architect***

- Advised early-stage startups on decentralized application architecture.
- Developed MVP mobile clients and Solidity contracts, bridging the gap between web2 UX and web3 infrastructure.

**Tubi TV** San Francisco, CA

Oct 2016 – Jun 2017

***Staff Engineer (Android / Android TV / Cast Lead)***

- **Team Leadership:** Led the Android and Chromecast engineering teams, serving 2M+ Monthly Active Users.
- **Architecture:** Redesigned the mobile streaming core (ExoPlayer) and modernized CI/CD pipelines to increase release velocity.

**Omada Health** San Francisco, CA

Aug 2014 – Oct 2016

## ***Senior Mobile Engineer***

- Scaled the flagship Android application for behavioral health, driving key patient engagement metrics.
- Integrated complex health data APIs (Google Fit, Samsung Health) and open-sourced internal UI libraries.

## **Bitheon Ltd**

Jan 2014 – Jul 2015

## ***Founder & CTO***

- Founded a crypto analytics platform (pre-Ethereum explosion), building the Node.js backend and Android client to aggregate global exchange data.

## **Early Career**

- **Aptina** – Android Software Engineer (2012 – 2013)
- **UCLA Biophotonics Lab** – Development Engineer (2010 – 2012)

## **EDUCATION & PATENTS**

---

- **University of California, Los Angeles (UCLA)** – B.S. in Electrical Engineering (Biomedical Option) — 2005–2010
- **U.S. Patent Holder:** Portable Rapid Diagnostic Test Reader

## **INTERESTS**

---

Cycling, freediving, spearfishing, and kayaking.