

Donovan Solms

Technical Co-Founder & Senior Product Engineer · Product Infrastructure, Realtime Systems & UX

I build products that feel effortless.

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Summary

Technical founder and product engineer with ~20 years building internet products, developer tooling, realtime systems, distributed systems, marketplaces, and crypto infrastructure. Most effective in small autonomous teams owning products end-to-end — from customer problems and UX to backend systems, infra, and production delivery. Prefer fast iteration, direct user feedback, and shipping over process.

Currently shipping **Signal** and **Monorail**; previously led **Astroport** across the Cosmos ecosystem. Built products from zero to **\$25M** traded in six months, operated a protocol at **~\$190M peak daily volume**, scaled a marketplace to **500k users in two months**, and built a healthcare platform to **acquisition**.

Core expertise

Problems	Trading workflows, swap aggregation, best-execution routing, AMM/DEX systems, market data, prediction markets, zero-to-one products
Leadership	Engineering lead, co-founder/CTO, product strategy, technical architecture, remote teams, governance, treasury operations, stakeholder delivery
Stack	Go, TypeScript, Solidity, React, Angular, Node.js, GraphQL, Postgres, TimescaleDB, Redis, Kubernetes, Docker, AWS, GCP
Blockchain	EVM, Monad, Ethereum, BSC, Avalanche, Fantom, Cosmos SDK, CosmWasm, AMM routing, indexers, smart contracts, IPFS

Experience

2025 — Present

Technical Co-Founder · Monorail

Building Signal, a live football prediction-market terminal, and Monorail, a swap aggregator on Monad. Own product, UX, execution systems, integrations, realtime infrastructure, and frontend delivery end-to-end.

- Launched Monorail to **\$22M** traded in six months with zero incentives; became the top native swap aggregator on Monad
- Built best-execution routing across 24 protocols using a synthetic-orderbook aggregation model
- Built an MCP server for Monorail that lets AI agents quote and execute swaps directly, bringing aggregator best-execution to agent-trading
- Built Signal as a live football prediction-market terminal with real-time probabilities, event-linked trades and one-tap execution
- Built an AI + Remotion content pipeline for Signal to generate post-match template reports and event recaps from match data
- Owned full-stack delivery across routing engine, execution, indexers, integrations, frontend, and visual system
- Tight user feedback loop on X and Discord — feature requests routinely ship same session. Example: mobile numeric keyboard request → shipped same day ↗

Monorail — <https://monorail.xyz> · Signal — <https://getsignal.trade>

2022 — 2025

Lead · Astroport

Led engineering and protocol delivery for a major Cosmos DEX/AMM. Joined as backend engineer when Astroport was Terra's largest AMM, continued building through the Terra collapse, then took over project leadership in late 2023.

- Worked on the protocol when it was Terra's largest AMM at **~\$190M peak daily volume**
- Led expansion and delivery across five Cosmos chains, including the main hub migration
- Ran multi-chain protocol R&D, CosmWasm-adjacent delivery, governance, treasury operations, and engineering continuity
- Kept the project shipping through the Terra collapse and later ecosystem rebuild

Astroport — <https://astroport.fi>

2020 — 2022

Co-founder and CTO · Dr Derma · Acquired

Co-founded and led technology for a regulated online dermatology platform in South Africa. Owned architecture, product roadmap, compliance-sensitive delivery, and remote operating processes through acquisition.

- Built to **acquisition** as Co-founder & CTO
- Architected a **medical-grade** platform compliant with South African healthcare regulation
- Stood up a remote-only team with clinical and engineering processes from day one

2018 — 2021

Core Contributor · Scala

Open-source cryptocurrency. Worked on the core node software and ecosystem tooling — added IPFS and ZeroNet capabilities to the node, implemented a distributed blockchain downloader, and shipped a user-friendly miner for multiple platforms.

- Added IPFS and ZeroNet capabilities to the core node (C++ via Go)
- Implemented a distributed blockchain downloader to speed up node sync
- Shipped a user-friendly cross-platform miner — broadened the contributor base beyond power users

2017 — 2020

Chief Technology Officer · iLivelt

Led architecture and engineering for a Python-based personalised video and PDF generation platform at scale, supporting international mobile-network product rollouts and bespoke client delivery.

- **Promoted from Senior Software Engineer to CTO** in 2017
- Led architecture for personalised video and PDF generation at scale
- Grew and mentored the engineering team through international product rollouts
- Owned direct technical relationships with top-tier mobile-network clients on bespoke solutions

2015 — 2017

Senior Software Engineer · iLivelt

Built a Python-based message distribution platform and scalable data-processing pipelines for mobile network clients; maintained and extended the core messaging services. Promoted to Chief Technology Officer in 2017.

2013 — 2015

Co-founder and CTO · Trevolta

Co-founded and built the technology platform for an online travel-crowdfunding marketplace, owning product execution, platform architecture, and early technical operations.

- 500k users in two months, peaking at **100k in a single day**
- Raised ZAR 1.5M (~US\$165k) seed
- Notable press: *Wall Street Journal* and *Los Angeles Times*

Side projects

Cryptwire (2021) — realtime trading infrastructure and analytics for cryptocurrency markets. Built after watching traders in crypto Discords manage portfolios in spreadsheets — Cryptwire replaced the spreadsheet with a live, opinionated dashboard. Architected and built end-to-end: backend services in Go, GraphQL API in Node, Angular frontend, exchange and trading-bot integrations.

DEX arbitrage bot (2022) — built to deeply understand Uniswap V2-style exchanges. Real-time trade and event extraction from the chain, cross-chain opportunity detection, and a flash-swap Solidity contract

written, tested, and deployed across Binance Smart Chain, Avalanche, and Fantom. Go + Solidity.

Skills

Languages	Go, TypeScript, Python, Solidity, Node.js, C#, PHP
Frontend	React, Angular, viem, ethers
Backend	Go, Node.js, GraphQL, NATS, Protocol Buffers
Data	Postgres, TimescaleDB, MySQL, Redis
Infra	Kubernetes, Docker, AWS, GCP
Blockchain	EVM (Ethereum, Monad, BSC, Avalanche, Fantom), Cosmos SDK / CosmWasm, Solidity flash-swap contracts, IPFS
AI	MCP server design for trade execution, AI + Remotion content generation, Claude Code / Codex in daily build loop

Education

University of Pretoria — Information Technology, then BIS Multimedia. Software engineering, information management, design, philosophy, and mathematics. Left early to start building full-time.

Publications & awards

Multi-Touch Handbook (2009) — co-authored two chapters on multi-touch hardware and software with Seth Sandler et al.

Mobile Marketing Association Award for Best Mobile Display (2009) — for the Livemobile Football “mobisite,” a near-real-time match-following UI for nine of the world’s biggest football competitions, optimised for low data usage and high engagement.

Talks & interviews

Meet IPFS (2021) — conversation with the Scala cryptocurrency team on using IPFS to secure a blockchain against 51% attacks, and the design of `libipfs` for interacting with IPFS from C++ via Go.

Scalability of personalised video generation on Oracle Cloud (2019) — interview with Ross Dawson on performance-testing Oracle Cloud against other vendors for personalised PDF and video generation at scale.
