

# Michael Snoyman

CTO / Engineering Executive — High-Assurance Systems

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## Professional Summary

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Engineering executive and hands-on technical leader with 20+ years building reliable, maintainable, high-assurance production systems. Experienced leading consulting-driven product engineering across fintech, blockchain, healthcare, enterprise software, and regulated domains.

Operates where technical reality, product direction, business goals, and stakeholder alignment meet. Strongest at turning ambitious product ideas into deliverable systems: shaping architecture, leading teams, managing risk, and translating technical strategy into business terms.

## Leadership Skills

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- **Engineering org leadership:** Hiring, mentoring, training, and leading over 100 engineers and technical contributors; setting standards that hold under real delivery pressure.
- **Architecture & technical judgment:** Owning architecture for systems that must stay reliable, secure, maintainable, and able to evolve.
- **Stakeholder navigation:** Aligning engineering, product, executive, board/investor, customer, and incumbent technical teams through ambiguity and friction.
- **Staged delivery:** Breaking large product visions into milestones that balance buildability, technical risk, architectural optionality, customer feedback, and business goals.
- **Financial & risk reasoning:** Applying actuarial training to fintech, trading, tokenization, decentralized finance, prediction markets, futures markets, insurance, and other risk-sensitive domains.
- **Ecosystem leadership:** Creating the tools, libraries, books, and training that turn advanced technology into practical production systems.

## Professional Experience

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### FP Complete / FP Block — CTO / VP of Advanced Software 2012 – June 2026

*Product-engineering consultancy delivering complex systems across fintech, blockchain, healthcare, and regulated domains.*

- Served as senior technical executive across architecture, delivery, client strategy, team leadership, and technical decision-making for the firm's most demanding engagements.
- Hired, mentored, and managed over 100 engineers and technical contributors; led multidisciplinary teams spanning engineering, product management, project management, QA, design, DevOps, mathematical modeling, and domain experts.
- Owned and reviewed architecture for production systems, balancing maintainability, security, delivery risk, product feedback, and long-term evolution.
- Partnered on board, investor, customer, and commercial conversations — translating technical strategy, feasibility, delivery risk, and architectural tradeoffs into business terms.

### | Selected Projects

- **Perpetual Swaps Platform:** Rescued a trading/perpetual-swaps platform two years behind schedule and built on an incorrect financial model. Corrected the model, rebuilt the architecture, introduced secure programming standards, and shipped in seven months.
- **Amgen Pharma Computation Platform:** Led end-to-end delivery of a regulated pharma platform across ~40 contributors; cut computation time from ~3 weeks to ~10 minutes.
- **NatGold Tokenized Asset Infrastructure:** Led engineering for tokenization of unmined gold and mining rights, including minting portal, token contracts, document/metadata workflows, and compliance-aware capabilities.
- **Six Markets Prediction Markets:** Multi-year rebuild of regulated sports-gambling and prediction-market systems across Cosmos and Solana; contributed product requirements, financial modeling, and CFTC-compliant data architecture.
- **Terra NFT Gaming:** Led product engineering for 12 blockchain games serving thousands of active users; supported a \$4M NFT auction and \$8M in recurring royalties.

### Suite Solutions — Enterprise Content Systems Engineer 2010 – 2012

- Built enterprise documentation, translation, and multi-format publishing workflows for global clients including Dell, SAP, and Plantronics.

- Architected and built the initial release of a CMS-backed documentation delivery product still in production today.

#### **Farmers Insurance Group — Senior Actuarial Analyst 2006 – 2009**

- Built reusable pricing models, ETL/data pipelines, and reporting tools for auto and homeowners books of business.
- Drove migration from legacy univariate ratemaking to multivariate GLMs; reduced rating-engine compute from ~1 hour to seconds.

### **Open Source & Community Leadership**

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- **Stack & Stackage:** Founding author and original architect of the reproducible-build tooling and curated package infrastructure underpinning production Haskell adoption.
- **Yesod, Warp & WAI:** Founding author and original architect of the core web framework and server infrastructure for production-grade, type-safe functional applications.
- **Open source author:** Author of 100+ open-source packages and multiple Rust tools spanning DevOps, security, async, streaming, and web infrastructure.
- **Haskell Foundation:** Board Member, 2021–2022.

### **Publications & Speaking**

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- Learning Programming Through Rust (Cambridge University Press, upcoming)
- [Begin Rust](#)
- [Developing Web Applications with Haskell and Yesod \(O'Reilly\)](#)
- [Yesod \(The Architecture of Open Source Applications\)](#)
- [Warp \(The Performance of Open Source Software\)](#)
- [Warp: A Haskell Web Server \(IEEE Spectrum / The Functional Web\)](#)
- Regular technical writer at [snoyman.com](#), conference speaker, and commercial trainer.

### **Technical Skills**

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- **Languages:** Rust, Haskell, TypeScript, SQL, C/C++, JavaScript
- **Domains:** fintech, blockchain, tokenization, prediction markets, trading systems, actuarial pricing, pharma/healthcare computation, enterprise software
- **Systems & Infrastructure:** backend & distributed systems, smart contracts, data pipelines, AWS, Docker, Kubernetes, Terraform, CI/CD, observability
- **Leadership:** architecture review, staged delivery, hiring, mentoring, engineering standards, cross-functional execution, stakeholder alignment

### **Education & Credentials**

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- **B.S. Mathematics / Applied Science (Actuarial Plan), Specialization in Computing:** University of California, Los Angeles, 2006
- **Actuarial credentials:** SOA Exams P, FM, M, C; CAS Exam 6; VEE requirements completed