

TOM WHITTAKER

<https://www.linkedin.com/in/tomwhittaker>

Summary

Distinguished technical leader with over 20 years of experience architecting resilient backend infrastructure and high-performance distributed systems. Proven track record in spearheading cross-functional AI-driven security initiatives and scaling global data governance frameworks. Expert in translating complex technical strategies into production-grade systems that support large-scale enterprise operations.

1/2019-Present

Senior Staff Software Engineer, Google

- Spearheaded the design and deployment of automated remediation pipelines within Google's Vulnerability Management infrastructure, leveraging Google Cloud to eliminate systemic risks at scale. Orchestrated a pioneering initiative utilizing Large Language Models (LLMs) to autonomously detect and patch critical vulnerabilities across global production infrastructure.
- Architected and scaled the privacy infrastructure for Google Core, enabling robust data governance for first-party applications on Google Cloud. Led the remediation of over 10 ExaBytes of sensitive data by engineering automated detection systems. Serving as a DPO Delegate and technical lead for Google Gemini, ensuring regulatory compliance for next-generation AI platforms through rigorous infrastructure-level privacy controls.
- Directed the engineering efforts for Google Fi's network infrastructure, managing a specialized team to deliver a high-availability VPN service. Established the security and privacy architectural standards for the Fi ecosystem.
 - Managed and TL of team of 9 engineers developing the Fi VPN
 - Lead privacy consultations and reviews for Google Fi.
 - Lead security program in Fi

4/2017-12/2019

Cloud Architect/Engineering Director, Cyngn: <http://cyngn.com>

Architected the comprehensive backend ecosystem for an L4 autonomous vehicle platform, focusing on high-reliability distributed systems.

- Engineered the off-vehicle cloud full stack infrastructure, designing scalable AWS-hosted platforms to manage real-time telemetry and fleet operations for autonomous units.
- Hired and managed 8 people who were responsible for AWS hosted full stack applications to manage fleets of autonomous vehicles.
- Lead sprints and developed software best practices for an entire engineering team of 40 people.

3/2016-12/2017

CTO, Sentient Investment Management: <http://sentientim.com>

Architected the backend infrastructure for AI-driven algorithmic trading, including high-throughput data processing pipelines and low-latency backtesting environments. Managed the technical strategy for distributed trading systems, overseeing a multi-disciplinary team of 20 engineers and researchers.

3/2008 to 3/2016

VP Engineering, Sentient Technology LLC: <http://sentient.ai>

Founding engineer and architect of a pioneering machine-learning-based trading platform. Scaled the engineering organization from 2 to 60+ members and oversaw infrastructure operations for a 100+ person global team. Designed highly available distributed systems for massive-scale financial data collection and analysis.

3/2006-10/2007

Architect – Mobile Monetization, Yahoo

While at Yahoo I was the lead architect for mobile advertising in the Connected Life group. Designed and led the development of Yahoo's first display and paid search mobile advertising platform. I also worked in Yahoo's corporate development group, evaluating companies with the goal of growing Yahoo's mobile advertising abilities via acquisition.

For a complete list of employment please refer to my [LinkedIn profile](#).

EDUCATION

BS Physics, George Mason University, Fairfax VA