# TL; DR

Results-oriented seasoned engineer having 20+ years of experience in establishing and scaling technology organizations, defining and drive execution on technical vision to deliver key business, product metrics.

## Technical Focus

* **Hands-on Distributed and ML Infra Systems expertise:** Design, deliver, and maintain production grade large-scale distributed systems and ML-infrastructure. Build and expose fault-tolerant APIs that operate under high reliability, low latency, and compute/storage constraints for external customers.
* **Drive digital transformations of products:** Drive cloud-native migrations, tech modernization initiatives (web, mobile, microservices) to improve client engagements and improve on business costs.
* **Extract Value from Data with robust governance, observability and security**: Adapt technical infrastructure and SDLC processes to ensure data governance, extract value from data. Manage data security, and regulatory compliance for sensitive data categories, such as MNPI/PII.
* **Robust Design and Language Proficiency**: Proficient and exposure to multiple general purpose programming languages and multi-modal data management approaches. Maintain language-agnostic approach to design and tooling stacks

## Organizational Leadership

* **Setup 3–5-year VSRs:** Define objectives and drive technology org vision, strategy and roadmap. Setup business metrics and regularly perform OKR health-checks to measure progress towards goals.
* **Org design and operating rhythm**: Design team structures, location strategy and operating rhythm in linear and matrixed organizational configurations. Align incentive structures and compensation strategies to optimize for high-performance engineering outcomes.
* **Align business stakeholders and build consensus**: Drive alignment across non-technical and technical stakeholders via periodic reviews and office hours.
* **Setup and scale high-performance software engineering teams across time-zones**: Kickstart 0 to 1 initiatives, scaled them across-multiple locations (100+ engineers).
* **Manage vendor relations, budget, staffing plans:** Drive buy vs. build strategies, select and manage technology vendors relationships working with budget envelopes.

## Domain Expertise

* **ML Infra for Ads Ranking and Generative AI for messaging:** Evaluation, understanding and observability infrastructure to improve efficacy of Ads ML ranking and recommendation models.
* **Sell-side Hedge Funds and Quants systems:** Extensive and deep experience in building front/middle/back-office systems, specifically portfolio accounting, portfolio valuations, tax accounting, investor allocations, reconciliation, AML compliance, transaction risk calibration and monitoring, order execution/settlement, and sensitive data management (PII and MNPI) within a complex global regulatory landscape.

# Work Experience

## [June 2021 - Present] Engineering Manager | Meta | New York

*Role:* Senior Manager, Ads Model Robustness

*Team Size:* org-size: ~45 professionals

*Primary Tech Stack:* C++, Python, Scribe, Presto, Hive/Spark, My-SQL

*Functional Domain:* Establish 0 🡪1 org focused on Ads ranking and recommendation models reliablity

*Engagements:*

* **[2021-2024]** Identify 0🡪1 opportunities, setup and scale new engineering org and teams focused on Ranking and Recommendation ML models reliablity
  + Define and drive engineering vision, strategy, roadmap, goals/OKRs, risk/reward trade-offs, development practices, operating rhythms, and production management processes
  + Built tools and observability infra to perform model evaluations and deliver actionable insights into model internal states. Tools rootcause, auto-mitigate and **prevent 1.4billion/year revenue losses**, and **reduce** time-to-detect, time-to-mitigate metrics **from weeks to min**
  + Drive business objectives through wide range of collaboration with cross-functional partners (approx. 150+)
  + Mentor and support high-performing ICs and EMs through regular performance reviews, incentive structures and feedback
* **[2022-2024]** Drive cross-department initiative to measure and improve engineering operational cost.
  + Define metrics to measure and improve developer efficiency metrics and, %engineering time spent on operation

## [Oct 2020 - June 2021] Executive Director | Goldman Sachs | New York

*Role:* Senior Director, SecDB Core Platform Engineering– Global Markets Division

*Primary Tech:* Slang, SecDB, C++, Java, BigQuery, IDE builds (Secview, VSCode extension, IntelliJ), Gitlab, CVS, Kanban

*Team Size:* org-size: 30 professionals

*Functional Domain:* Enhance programming experience for listed product pricing and risk modeling used by quant traders.

*Engagements:*

* Drove adoption initiatives for internal proprietary technology (Slang runtime and SecDB)
  + Setup a collaborative and open-source code-contribution SDLC model for SecDB
  + Managed business stakeholder relationships, and align technology roadmaps
  + Enhanced low-level programming constructs and compute efficiency in order to price, analyze and run risk-assessments listed financial instruments
  + Improved and modernized programming language design, to enable cloud-native adoption

## [Jan 2006 – Oct 2020] Executive Director | Morgan Stanley | New York

*Role: Senior Director, Morgan Stanley Fund Services and Prime Brokerage*

*Team Size:* org-size: 125+ professionals

*Primary Tech:* Core Java, Spring boot, REST/SOAP Webservices/APIs, SQL / No-SQL databases, Cloud-Native tooling (Azure), Angular, WebSocket, Messaging Queues, open-NLP, OCR & 2D dynamic Barcode Imaging libraries, BOX APIs, GIT and Devops tools

*Functional Domain:* Prime Brokerage and Hedge Fund servicing products for Tax/Portfolio Accounting, Reconciliations, Cash / Payment and Billing Systems, Custody systems, Investor Allocations, Investor/Fund Data Management and Reporting, AML and risk-score monitoring systems.

*Engagements:*

Joined as founding member of MSFS. Over course of 15 years played various roles in transforming the organization into a global leader in hedge fund servicing.

* ***[2017-2020]*** Identified opportunity and established senior engineering team (~10 engineers) focused on AML/KYC & Activity monitoring, directly contributing yearly **7% top-line revenue growth for MSFS**.
  + Delivered industry-first ML model driven point-based ranking tool for analyzing investment and franchise risk
  + Drove technology strategy, roadmap collaborating closely with key stakeholders (AML, company legal, clients and technical vendors/data-providers)
  + Oversaw all aspects of the end-to-end product development & deployment, enabling real-time rule-based screening of suspicious transaction activities and ensuring compliance with stringent US and Cayman AML regulatory standards.
  + Scaled the functionality to analyze and extract key features from millions of documents (emails/pdfs/images) in a batch mode.
* ***[2017-2020]*** Conceptualized and led a **digital transformation** initiative focused on adaptive interview-based web experience for order execution, aimed to replace physical processing documents, signatures and improving automation/eliminating manual checks.
  + Built partnership and drove technology strategy and implementation projects for integrating electronic signatures using DocuSign.
  + Replaced manual investment process by delivering a configurable web experience for various legal/regulatory templates (contributions, redemptions, transfers, investment/PII attribute changes)
  + Rolled-out an inhouse ML based fault-tolerant document data-scraping engine, reducing content extraction time by 75%
  + Scaled backend components to handle ~4 million client tasks per month with an average task execution time of under 1 second, resulting in reduced client interaction time by 40%
* ***[2014-2020]*** Managed and extracted valuable insights from central data-warehouse housing hedge fund investment data. Delivered technology solutions helping reduce client staffing needs by 10% YoY(**150 FTEs savings)**
  + Implemented data de-duplication and centralization strategies, significantly enhancing the usability, scalability, and overall maintenance of client applications and improving API response time by 400% (averaging 200 msec/request)
  + Externalized client data access through fault-tolerant APIs, distributed compute/cache systems, and content validation techniques for serving requests to ~90+ downstream dependent applications (~250K app interactions/hour)
  + Built analytics tooling to extract actionable insights from data (~3.5 billion entitlement units, millions of physical documents, thousands of curated attributes).
  + Successfully met annual technology compliance goals (SSAE16 certification, GDPR regulations) for safeguarding client trade-secrets, PII / MNPI data control, effectively preventing misdirected communication.
  + Drive organizational strategy (org size ~40), engineer growth and technology program roadmaps collaborating with senior engineers, stakeholders
* ***[2006-2014]*** Early software developer and founding member, helping **build key technology blocks and establish MSFS** as a prominent service fund administrator and **optimizing** business operations for prime brokerage.
  + Developed algorithms to analyze for washsales, constructive sales, qualified dividends transaction, helping traders take tax-efficient decisions.
  + Developed market-first tax allocation system to prepare on-demand tax estimates and K-1 allocations.
  + Built reconciliation system that performed position, transaction and cash-balance reconciliation. Trade break resolution time reduce by 90%
  + Built Cash Management and Payment systems – handling ~trillions of dollars of money movement
  + Built Billing system helping streamline and automate tracking, improving collection rates by 30%
  + Replaced vendor systems through inhouse builds for portfolio allocation engines. Helped eliminate vendor license cost and provide competitive business advantage

## [Jan 2003 – Jan 2006] Software Programmer | Mastek Ltd. | London / Mumbai

* Replaced legacy IBM mainframe with distributed design/codebase in healthcare claims processing space.

## [Jun 2001 – April 2002] Engineering Intern| Indian Institute of Technology Mumbai

* Study and build prototype for SIP protocol handshake using VB.Net to make VoIP based phone calls

# Education

Bachelors in engineering| Electronics & Telecommunication (June 1998 – June 2002)

* First Class with Distinction, Mumbai University, India