JOEL LIM

VICE PRESIDENT | AI INNOVATION & TRANSFORMATION | ENTERPRISE DATA ARCHITECT | INVESTMENT INTELLIGENCE

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EXECUTIVE PROFILE

Vice President leading AI innovation, solution architecture and enterprise transformation across investment and operations. Combines business insight with technical expertise to conceptualise, develop and scale innovative business and technology solutions. Recruits and directly manages engineers and technical consultants, partnering with Technology, Cybersecurity, Legal and investment teams to deliver secure, reliable and scalable solutions from proof of concept through production deployment and enterprise adoption.

LEADERSHIP & EXECUTION

AI Innovation & Solution Architecture • End-to-End Product Development & Scaling • Technical Talent Acquisition & Leadership • Strategic Technology Partnerships • Portfolio Strategy & Resourcing

PROFESSIONAL EXPERIENCE

TEMASEK HOLDINGS

Singapore | 2022–Present

Vice President, Data Management (Innovation & Governance) Apr 2024–Present

Digital Innovation Lead, Data & Analytics Enablement 2022–Mar 2024

PORTFOLIO OVERSIGHT | ~S$2.5M annual OPEX for engineering and consulting capacity • **~S$4M project CAPEX** for data, AI innovation and product development

AI Innovation & Investment Intelligence

Lead the COO's AI innovation portfolio and go-to proof-of-concept capability, evaluating opportunities, directing rapid prototypes and advancing validated solutions towards production grade and enterprise adoption.

- Conceptualised and scaled an AI-integrated analyst ratings and investment intelligence platform connecting research, risk-taking and investment outcomes to portfolio decisions; grew adoption from 6 to 45 users across three teams, reaching over 90% of public-equities analysts.
- Led the build and deployment of reusable AI data extraction using two open-source SLMs and LLM-based adjudication across multiple enterprise use cases; delivered for S$250K in build and run costs versus proposed S$2–3M/year staffing or outsourcing alternatives.
- Led architecture and development of a conversational AI agent for complex derivatives trading, orchestrating RFQs, price selection and trade booking through one chat interface to simplify fragmented, multi-party workflows.
- Won Temasek's 2025 CEO AI Challenge as part of two winning teams.

Enterprise Product Innovation & Transformation

Lead enterprise product innovation from business challenge through architecture, delivery and adoption, translating investment-team needs into scalable technology capabilities.

- Conceptualised and led an in-house equities e-ticketing platform from design to deployment, achieving 100% adoption in its initial 12-person team and expanding firmwide to at least 80 users; AI-assisted checks support accurate execution as an alternative to a costly commercial OMS.
- Pioneered AI-assisted event-log generation to accelerate process mining with Celonis, extending process analytics to more than 50% of post-settlement operations and identifying bottlenecks, inefficiencies and operational risk exposures.
- Introduced process intelligence, workflow orchestration and AI-enabled capabilities with technology partners including Celonis, Xceptor and Microsoft Copilot; worked with front-office teams to secure sponsorship and identify opportunities for adoption.
- Recruit, hire and directly manage technical consultants and engineers. Lead architectural design decisions and integration with enterprise technology teams while ensuring reliable deployment and user adoption.

Enterprise Data Architecture & Governance

Drive reliable, traceable and AI-ready data architecture and governance across investment and operations.

- Advanced private-investment information into AI-ready enterprise analytics, prototyping extraction capabilities before shifting to repeatable vendor-supported data ingestion for research and downstream AI use cases.
- Led FLEXtrade EMS data architecture and integration, structuring trading data for investment research, risk analytics, regulatory reporting and T+1 settlement readiness.
- Reengineered traditional data governance beyond cataloguing, integrating data lineage, ontology and automated quality controls to accelerate root-cause analysis and reduce data recovery time from weeks to hours.

GIC PRIVATE LIMITED

Singapore | 2017–2022

Assistant Vice-President, Business Solutions and Analytics

GIC Professionals Programme (2017/18)

- Led portfolio-execution optimisation through internal crossings, netting and transfers, contributing to over US$20M in annual alpha across portfolios.
- Developed and backtested quantitative signals from sentiment analysis, broker research and third-party datasets; used regression to optimise factor scores and weights for strategies supporting a ~$70M portfolio.
- Quantified country and currency risks for private equity investments, translating geopolitical and foreign-exchange exposures into financial estimates to support investment decisions.
- Designed and developed an analytics portal for broker and custodian performance, combining stakeholder requirements, statistical counterparty scoring and self-service reporting.
- Automated valuation of bespoke Total Return and Equity Index Swaps, alongside live fixed-income P&L and currency-exposure monitoring.
- Completed cross-functional rotations across Private Equity, Internal Audit, Systematic Investments, Investment Services, and Business Solutions & Analytics through the GIC Professionals Programme.

GOLDMAN SACHS

Summer 2016

Summer Analyst, DevOps — automation and optimisation of engineering workflows.

ROLLS-ROYCE AEROSPACE

Jan–Jun 2015

Process Engineering Intern, Advanced Technology Centre, Derby, United Kingdom.

EDUCATION & RESEARCH

Singapore Management University — EngD candidate, School of Computing and Information Systems (in progress); research in process optimisation and algorithm design, including process discovery and decision-driver inference from relational data.

Singapore Management University — Master's in Economics (Econometrics & Quantitative Economics), 2022

Nanyang Technological University — B.Eng., Electrical & Electronic Engineering (Infocomm), 2016

Chartered Market Technician — Level III, 2019

SELECTED PUBLICATIONS & MANUSCRIPTS

Published — BPM 2026 | "Process Routing and Decision Driver Discovery from Relational Databases Without Prior Event Logs." 24th International Conference on Business Process Management, Springer LNCS, pp. 485–502.

Major revision invited — Information Processing & Management | "Automated Relational Trace Reconstruction: A Schema-Agnostic Framework for Event Log Discovery from Enterprise Databases" (manuscript under review).

CORE EXPERTISE & TECHNICAL CAPABILITIES

AI Innovation & Applied Research: Agentic AI systems, LLM orchestration and evaluation, intelligent data extraction, NLP, process mining and quantitative modelling.

Enterprise Data Architecture & AI Solution Delivery: Data architecture and integration, data lineage and ontology, intelligent data pipelines, AI solution design, process automation and end-to-end product development.

Technical Leadership & Transformation: Engineering recruitment and direct people management, multidisciplinary technical delivery, enterprise stakeholder engagement, strategic technology partnerships, portfolio prioritisation and resourcing.

Engineering & Technology Stack: Python, SQL, R, React, AWS, Snowflake, Collibra, API integration, Git and CI/CD pipelines.