# **Subhadip Mitra**

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github.com/bassrehab linkedin.com/in/subhadipmitra-in Data & Al Strategy, Multi-Agent Systems, Enterprise Architecture, Cloud Transformation, Technical Leadership, GenAl, Python, Java

#### **EXECUTIVE SUMMARY**

Senior Technology Leader with 15+ years of experience driving enterprise transformation through Data, AI, and Cloud innovations. At Google Cloud, I lead the Data Analytics practice in Southeast Asia while spearheading technical innovation through published frameworks like <u>ARTEMIS</u> and privacy-centric protocols. My approach combines strategic vision with technical execution-building high-performance engineering teams, architecting billion-scale data platforms, and delivering solutions with \$30M+ business impact across JAPAC.

#### PROFESSIONAL EXPERIENCE

Google Cloud – Professional Services Organization, Southeast Asia

Data & Analytics Manager | Site Lead, PSO Southeast Asia

Singapore | 2021–Present

Leading Google Cloud's Data Analytics practice while serving as Site Lead overseeing cross-practice delivery governance in Southeast Asia across Data & Analytics, Al, Infrastructure, Security, Enterprise Architecture, and Application Modernization.

- Direct a \$20M+ Data Analytics delivery portfolio across JAPAC while simultaneously overseeing a \$30M+
  cross-practice delivery portfolio as Site Lead for Southeast Asia, all with consistent customer satisfaction.
  (last 2 years).
- Published ARTEMIS (<u>technical invention disclosure</u>), an adaptive multi-agent framework for enterprise decision-making, demonstrating continued technical contribution beyond management responsibilities.
- Led critical interventions for strategic accounts across JAPAC including a major financial services provider (7-week onsite intervention transforming governance and architecture) and a global consumer electronics manufacturer (strategic roadmap development preventing customer migration to alternative platform).
- Executed high-value projects including a global shipping company's 12,000+ user analytics migration, a leading bank's first Data & Al Center of Excellence in JAPAC, and a telecom provider's first-of-its-kind Data Monetization Platform
- As co-Site Lead, scaled regional delivery excellence contributing to 100% annual revenue target attainment with **97% CSAT** across all Southeast Asia projects.
- Built high-performing teams exceeding utilization targets despite market headwinds, with focused upskilling in GenAl, cloud data technologies, and database modernization.
- Spearheaded the first \$X million Sovereign GenAl Transformation program, delivering it across 20+ government agencies within 3 months.

 Led \$25M in strategic pursuits across JAPAC with a 41% win rate, converting major accounts across financial services, manufacturing, and retail sectors.

#### Standard Chartered Bank

#### Principal Engineer - Data & Analytics Transformation

Singapore | 2019-2021

Led enterprise-wide **Al and data platform** development serving **11 markets** and 1200+ global users, delivering technical excellence while influencing C-suite data strategy.

- Delivered a Self-Service ML Platform that reduced model development and deployment time from 6 months to 1 week, establishing new standards for model development efficiency
- Designed credit risk Al models integrating alternative data sources, improving accuracy by 15% while maintaining regulatory compliance
- Modernized MarTech infrastructure, scaling customer analytics and driving a 30% increase in acquisition through data-driven engagement strategies

## Think Big Analytics (a Teradata company)

#### **Principal Data Engineer / Solution Architect**

Singapore | 2017-2019

Architected enterprise-scale data solutions for Fortune 500 clients across APAC, designing scalable platforms with measurable business impact.

- Designed and developed grounds up 5 Data Lakes across the globe, with highly scalable ETL pipelines serving data volumes of up to 1.2 PB per hour and 40K daily files
- Engineered the low latency real time in-memory platform, processing over 2.5 million events/sec
- Devised a distributed unstructured data ingestion and processing framework for PDFs, Images, MS Excels, Emails, Voice, Video
- Built RT fraud detection ML system for a leading Bank that reduced false positives by 60% and increased detection rates by 70%
- Successfully built and upgraded multiple Hadoop clusters on Cloud/On-prem ranging between 150-250 nodes

## UTU (utu.global)

#### **Technical Lead**

Singapore | 2016-2017

Led technical strategy and engineering for a fintech startup, delivering high-performance payment systems and enabling market expansion into Thailand.

- Delivered high-performance payment/rewards systems, ensuring 99.99% uptime, sub-25 μs latency, and scalability to handle peak transaction volumes
- Defined technology roadmaps enabling product growth and market expansion into Thailand, working directly with C-level executives and banking partners
- Established architectural patterns and governance frameworks for mission-critical payment systems, balancing innovation with compliance requirements

## Truckaurbus Marketplace Pvt. Ltd. (truckaurbus.com)

#### Founder & CTO

India | 2014-2016

Founded and scaled a **B2B digital marketplace** across **15 cities**, leading end-to-end technical strategy and product development.

- Built a platform supporting real-time auctions and programmatic advertising, enabling transparent pricing for B2B services
- Established partnerships with 25+ OEMs and banks, creating an ecosystem that drove rapid market adoption
- Led technical architecture decisions and development processes, balancing rapid iteration with scalable infrastructure

### Various Companies

## **Software Engineering, Architecture and Technical Consulting Roles** 2010-2014

Progressively advanced through roles in software development, operating systems, device programming, kernel programming, systems integration, and technical consulting within financial services and algorithmic trading domains.

- Consistently exceeded performance expectations, leading to promotions and increased responsibilities
- Developed strong expertise in C/C++/C#/Java development, architectural design, and client communication

#### **EDUCATION**

## Birla Institute of Technology and Science, Pilani, IN

MBA, Business Analytics

2021-2023

**Courses:** Financial Risk Analytics, Marketing Models, Financial Management, Strategic Management, Operations Management, Financial and Management Accounting, Predictive Analytics

## Birla Institute of Technology and Science, Pilani, IN

Master of Technology, Software Systems

2017-2020

**Courses:** Algorithms, Distributed Systems, Deep Learning, Natural Language Processing, Machine Learning, Artificial Intelligence (AI)

#### **CERTIFICATIONS**

- Google Cloud Certified Professional Cloud Architect (2024)
- Google Cloud Certified Professional Machine Learning Engineer (2024)
- Google Cloud Certified Professional Cloud Data Engineer (2022)

#### PUBLICATIONS & TECHNICAL INNOVATIONS

- ARTEMIS Adaptive Multi-agent Debate Framework (TD Commons, 2025)
  - Technical disclosure on an adaptive framework for multi-agent decision systems, using structured debate protocols to enhance enterprise decision-making through collaborative reasoning.
- ETLC Framework for GenAl-Era Data Platforms (Google, 2024)

A framework reimagining data platforms for the Generative AI era, enabling context-aware data pipelines that enhance LLM capabilities through improved data preparation and enrichment.

- Continuous Context Propagation System (Google, 2024)
  - Patent-pending approach for automatic context propagation in complex data ecosystems, solving intricate data relationship challenges at scale through advanced modeling principles.
- Automated Cloud Workload Discovery System (Google, 2023)

A system leveraging billion-node graph models for architecture assessments and spatiotemporal graph optimization approaches, enabling automated discovery and mapping of complex cloud workloads.

- Data Monetization Strategy for Enterprises (BITS Pilani, 2023)
  - A comprehensive framework for enterprises to transform data into economic value, establishing methodologies now implemented across multiple JAPAC organizations.
- Open Location Proof (OLP) Protocol (2022, Website)

A privacy-aware open protocol for non-repudiable point-in-time presence verification, published with complete specifications and reference implementations.

OConsent: Open Consent Protocol (BITS Pilani, 2021, Website)

A blockchain-based protocol for transparent personal data processing, enhancing user control and compliance with data privacy regulations.

#### TECHNICAL EXPERTISE

- Technology Leadership & Strategy: Enterprise Architecture, Technical Vision & Roadmaps, Digital
  Transformation, AI & Data Strategy, Cloud Architecture, Multi-Region Deployments, Security & Compliance,
  C-Suite Advisory, Business-Technology Alignment
- Data Engineering & Architecture: Petabyte-Scale Data Platforms, Data Pipelines, Real-Time Data Processing, Data Mesh & Data Fabric, Data Modeling, Polyglot Persistence, Cloud Data Architectures, Data Governance, Apache Spark, Apache Flink, Apache Kafka
- Generative AI & Machine Learning: Multi-Agent Systems, Large Language Models (LLMs), Responsible AI, Model Governance, Retrieval-Augmented Generation (RAG), Vector Databases, LLMOps, Multi-Modal AI, Enterprise AI Integration, ML/AI Infrastructure
- Engineering Leadership: High-Performance Team Building, Technical Mentorship, Engineering Excellence, Delivery Management, Architecture Reviews, System Design, Performance Optimization, Cross-Functional Collaboration
- Cloud Platforms & Infrastructure: Google Cloud Platform (GCP), BigQuery, Vertex AI, Cloud Spanner, GKE,
   Terraform, Infrastructure as Code, Serverless Architectures, Event-Driven Systems, Microservices
- **Programming & Development:** Python, Java, SQL, C/C++, JavaScript, Scala, Systems Programming, Low-Level Optimization, Concurrency & Parallelism, High-Performance Computing

#### **RESEARCH INTERESTS**

- **Multi-Agent Systems:** Cooperative AI, Agent Communication Protocols, Emergent Behaviors, Multi-Agent Debate, Consensus Mechanisms, Agent Coordination
- Privacy-Preserving AI: Differential Privacy, Federated Learning, Multi-Party Computation, Homomorphic Encryption, Privacy-Utility Tradeoffs, Consent Management
- Advanced Computing Architectures: Quantum Computing, Neuromorphic Computing, Post-Quantum Cryptography, Approximate Computing, Non-Von Neumann Architectures
- Theoretical Foundations: Mathematical Modeling, Information Theory, Complex Systems, Probabilistic Methods, Distributed Consensus