

Contact

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Top Skills

Big Data Analytics

HiveQL

Scala

Languages

Hindi (Full Professional)

English (Full Professional)

Malayalam (Native or Bilingual)

Certifications

IBM Certified Application Developer - Cloud Platform V1

Google Cloud Platform Fundamentals: Core Infrastructure

MapR Certified HBase Developer

AWS Certified AI Practitioner Early Adopter

MapR Certified Hadoop Developer

Honors-Awards

Service & Commitment Award

AIP Anchor

TCS Mobility Award - Technical Excellence

Macquarie Award for Opportunity & Innovation

Poornima Tom

Engineering Manager| Data Engineering| AWS Certified| Big Data| Spark| FinTech| Risk Surveillance| GenAI enthusiast
Greater Sydney Area

Summary

I'm an experienced Engineering Manager and Data Engineer with 13+ years in designing and delivering scalable, cloud-native data solutions across financial services and risk surveillance. Currently leading high-performing agile teams at Macquarie Group, I drive full-cycle delivery — from architecture to production — using technologies like AWS, Apache Spark, Hive, Airflow, Java, and Python.

My work sits at the intersection of cloud innovation, big data analytics, and regulatory compliance. I've built robust data pipelines and supervised mission-critical applications, enabling better surveillance, transparency, and data-driven decision-making across Macquarie groups, RMG and CGM.

Technical Strengths:

AWS (Certified) | Spark | Hive | Hadoop | Scala | SQL | Airflow | Java | Python

Data Engineering | CloudFormation | RDBMS | HiveQL | Infrastructure-as-Code

Agile Delivery | People Leadership | Stakeholder & Risk Management

Currently exploring how Generative AI and agentic systems can enhance surveillance capabilities and automation in fintech. I'm passionate about empowering teams, modernizing legacy systems, and creating real business impact with cloud-first, AI-ready data platforms.

Experience

Macquarie Group

5 years 6 months

Engineering Manager & Delivery Lead – eCommunication Surveillance
May 2023 - Present (2 years 1 month)

Sydney, New South Wales, Australia

As an Engineering Manager and Delivery Lead, I lead two agile engineering teams delivering compliant and scalable solutions in the eCommunication Surveillance & Supervision space. I oversee full-cycle project delivery — from designing technical architectures to building cloud-based data pipelines — using technologies like AWS, Java, Python, Apache Spark, Hive, and Airflow.

In close collaboration with Product Owners, Risk Management Group (RMG), and Commodities and Global Markets (CGM), I ensure alignment with Macquarie's business goals and evolving regulatory obligations.

Key responsibilities:

- Leading design and implementation of back-end applications and big data solutions on AWS
- Managing and mentoring two cross-functional agile teams (10+ engineers)
- Driving agile execution, including backlog refinement, sprint planning, and delivery
- Building robust data pipelines using Spark, Hive, DBT and Airflow
- Engaging business stakeholders across risk, compliance, and trading desks
- Championing risk management, platform stability, and engineering best practices

With a strong foundation in cloud engineering and big data platforms, I'm now transitioning into the AI space, focusing on how machine learning, agentic AI, and intelligent automation can enhance surveillance, improve detection accuracy, and drive strategic business outcomes.

Data Engineer - AWS & Big Data - Risk Surveillance Technology
December 2019 - May 2023 (3 years 6 months)

Sydney, Australia

Experienced Data Engineer with a focus on AWS cloud and big data technologies. Skilled in building scalable data pipelines using Apache Spark, Hive, Hadoop, and Scala. Proficient in SQL, RDBMS, and HiveQL, with hands-on experience in deploying infrastructure via AWS CloudFormation.

Strong problem solver with a track record of delivering reliable, high-performance data solutions. Excellent communicator, adept at translating business needs into technical outcomes. AWS-certified, with a passion for data analytics and cloud-first architecture.

Commonwealth Bank

Big Data Engineer

October 2017 - December 2019 (2 years 3 months)

Sydney, Australia

Vendor staff (TCS) working as a Big data developer in the bank's Financial Crime Platform. Responsibilities include engaging with technical and business stakeholders, developing ETL pipelines and end-to-end agile delivery. Hands-on experience in creating ETL workflows using Spark/Hadoop frameworks and HiveQL. Managing and mentoring a team of developers.

Tata Consultancy Services

Data Engineer (Big Data, IoT & Data Science) - TCS Digital Enterprise

August 2015 - December 2019 (4 years 5 months)

Cochin Area, India

Big Data Engineer at TCS Digital Enterprise. Responsibilities include business analysis, analytical modeling and creating solutions for challenges in Big Data and Internet of Things. Involved in initiatives across industries and alongside related technologies like Cloud, Mobility and Social Media. Worked on Spark, HBase, Kafka, Spring-WS, Analytics in R, PostGre SQL, MQTT Services and Amazon EMR/Kinesis/EC2.

Tata Consultancy Services

Mobile Application Developer

September 2010 - August 2013 (3 years)

Designer and Developer of Windows 8 Phone/Tablet Applications

Career Launcher

Instructor

June 2010 - September 2010 (4 months)

Kochi

Quantitative Aptitude, Logical Reasoning, Soft Skill Development

Education

College of Engineering, Trivandrum

Master of Technology (M.Tech.), Computer Science and
Engineering · (2013 - 2015)

Rajagiri School Of Engineering and Technology
Bachelor of Technology (B.Tech.), Computer Science and
Engineering · (2006 - 2010)