

# Rajeeva Lochana Moorthy, K

rajiv@nus.edu.sg | LinkedIn: RajeevaMoorthy | ResearchGate: Rajeeva\_Moorthy

## Profile

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- 15 years of analytics, engineering and program management experience in start-ups and MNC.
- Experienced in client & stakeholder consulting and influencing CxO level leadership with value analytics and engineering strategies.
- Managed engineering programs and research collaborations focusing on Operations Research and Data Science.
- Goal-oriented and Agile leadership practice with experience managing multicultural, multilingual teams (on-site/remote) in Asia & South America.
- Continuous learning mindset with hands-on development skills in open-source and proprietary stacks across mainframes, on-premise compute & cloud.
- Scalability-focussed Architect & Cloud Practitioner experienced in Serverless Microservices.
- Domain depth in Supply Chain, Port Logistics, Transport, Research, Energy & Fintech.

## Core Competencies

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- Programming: Object Oriented & TDD with experience in Python, C++, JAVA, C#, PHP.
- Architecture: SaaS, IaaS, AMQP, MQTT, Microservices, API-first.
- Cloud: AWS, GCP, Django, Serverless, REST.
- Data management: RDBMS, NoSQL, Data Lake, Pandas, Perl, Excel, VBA.
- Analytics: Statistics, Forecasting, Predictive Modeling, Design of Experiments.
- OR & ML: CPLEX, MATLAB, AIMMS, AutoMOD, MIP, Auction, Graph, Clustering and Regression.
- DevOps: CI/CD, Git, Jenkins, Selenium, Docker.

## Professional Experience

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Senior research Fellow - IORA, NUS, Singapore. 2020 - Current

- Project Management: Managing initiatives to bridge theory of Prescriptive Analytics to Practice.

Principal Technologist - Data Science. CFOremoto SpA, Chile. 2017 - 2019

- Architecture: Building Serverless Microservices on AWS / GCP using Lambda, DynamoDB, RDS/MySQL, SNS, SQS, EC2, S3, FCM, providing REST API using Python/Django.
- Data Science: Database Schema & Index design. Building Fault-tolerant, Serverless & Secure ETL / ELT Pipelines for financial data.
- Analytics: Processing at-rest and streaming data to compute KPIs, real-time dashboards and analytic storyboards using distributed graph algorithms.

Associate Principal Analyst. Planning Dept, PSA Corporation, Singapore. 2004 – 2012

- Program Management: Leading Projects, Research Groups, Operational stakeholders and Implementation teams to define, build and manage the Ideation, Prototyping and Deployment of Optimization solutions.
- Algorithms & Optimization: Building production-ready Solvers for Demand Allocation, Vessel Berthing, Scheduling, Truck / AGV Deployment, Yard Planning, Terminal Simulation and Port Automation. Hands-on experience in implementing Math-models & Meta-heuristics with precise and stochastic data. Designing and building distributed compute & storage infrastructure on commercial hardware for scalability.
- Data Analytics & Process Improvement: Building statistical decision support systems, defining & measuring KPIs and re-engineering operational processes. Delivering staff & equipment productivity gains with involvement in full process improvement lifecycle. Developing forecasting models and monitoring tools for stakeholders to support tactical & strategic terminal planning and capacity reviews.

Research Fellow. Dept of Decision Sciences, National University of Singapore. 2002-2004

- Research and Development: Engaging industry partners, scoping projects, developing algorithms, deriving & presenting insights and publishing journal papers.

Senior Systems Engineer, OR. Savi technology Asia, Singapore. 2000-2002

- Process Consulting: Technical consulting, project evaluation and logistics processes design using RFID based IoT-like edge devices and in-house software stack. Managing the truck deployment and delivery optimization initiative.

## Education

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Masters in High Performance Computation. Singapore-MIT Alliance, NUS, Singapore. 1999-2000

- Applying OR methodology for deadlock prediction and avoidance in an AGV system.

Bachelors in Mechanical Engineering. India. 1995-1999

- Thesis on voice controlled industrial robotics.

## Other Pursuits

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- Writer & Photographer whilst traveling on foot (3,000 km) in NZ and bicycle (30,000 km) in SE Asia and the Americas (2012-2017).
- Energy Market Company, Singapore: Statistical Analysis & Testing the Market Optimization model for procuring and distribution of energy (2014).
- Omina WFM, Argentina: Built cloud scale workforce scheduler using Genetic Algorithms (2017).
- Languages: English, Spanish, Tamil, Hindi.