ROMMEL V. LAGERA

AI Solutions Engineer | Forward-Deployed Engineer | Enterprise Systems Integration Specialist

Contact

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Portfolio: https://rvl-cv-sg.aitechdev.cloud

Location: Open to Singapore relocation | Currently based in Cavite, Philippines

Nationality: Filipino

Notice Period: Negotiable

PROFESSIONAL SUMMARY

Results-driven **Forward-Deployed Engineer** and **Solutions Architect** with **30+ years** delivering enterprise-grade systems across telecommunications, billing, IoT, and payment platforms. Proven track record of end-to-end solution delivery—from requirements gathering through deployment, client training, and production support—serving **31,000+ active customers** and processing **₱250 million annually** across multiple operators.

Currently expanding into **AI/GenAI engineering** with hands-on proficiency in **Claude Code, Google Gemini, Codex, DeepSeek, and GLM** for AI-assisted development workflows. Pursuing formal AI engineering certification through DataCamp's Generative AI track. Seeking to leverage deep enterprise integration expertise and emerging AI capabilities in a client-facing **AI Solutions Engineer** role, bridging legacy systems with modern AI infrastructure.

CORE COMPETENCIES

AI & Generative AI	Systems Integration	Client Solutions Delivery
LLM Integration & Prompt Engineering	API Architecture & REST Services	End-to-End Project Ownership

AI-Assisted Development (Claude Code, Gemini, Codex)	Legacy System Modernization	Requirements Analysis & Solution Design
RAG Architecture Fundamentals	Database Migration & Optimization	Stakeholder & Vendor Management
Python, TensorFlow Basics	Real-Time Data Processing	User Training & Production Support

Technical Stack:
Languages: Python, Java, Kotlin, JavaScript, Ruby, SQL, BASH
Frameworks: Spring Boot, Node.js, Express.js, React Native, OpenXava/XavaPro
Databases: PostgreSQL (v9–16), MySQL, MariaDB, SQLite
Cloud & DevOps: Digital Ocean, Linode, Ubuntu, CentOS, Git, Docker, OpenVPN
Telecom/IoT: Asterisk PBX, FreeRADIUS, daloRADIUS, SIP Protocols, RFID/QR Systems
AI Tools: Claude Code, Google Gemini AI Studio, GitHub Codex, DeepSeek, GLM, Kilo

AI & GENAI PROFESSIONAL DEVELOPMENT

DataCamp — AI Engineering Track (Generative AI Focus) | 2026 | *In Progress*
- Large Language Models (LLMs) and prompt engineering
- RAG (Retrieval-Augmented Generation) implementation
- AI application development and deployment

Self-Directed Learning — Udemy, YouTube, Hands-On Projects | 2025–Present
- Daily AI-assisted development using Claude Code, Gemini, Codex, DeepSeek
- Prompt engineering optimization for software development workflows
- AI tool integration for legacy system modernization projects

TensorFlow & Python — Machine Learning Fundamentals | 2021
- Computer vision: Vehicle recognition (car/motorcycle classification)
- Model training and inference pipeline development

PROFESSIONAL EXPERIENCE

Forward-Deployed Engineer & IT Solutions Consultant

AOT Group (MRDC / TETCO) | Surigao del Sur, Philippines | 1993 – Present

Independent consultant providing end-to-end solution delivery for rural telecommunications and cable TV operators—functioning as a forward-deployed engineer with full ownership of design, development, deployment, client coordination, and ongoing support. Evolved operator billing from basic voice call services to predominantly internet service billing as the industry transitioned to broadband.

Enterprise Billing Platform — AI-Ready Data Architecture
- Architected and maintain billing systems processing **₱250 million annually** across 6 operators (4 telco, 2 cable TV), serving **31,000+ active customers**
- Evolved platform from basic voice call billing to internet service billing as operators transitioned to broadband ISP services
- Personally developed **98% of codebase**, demonstrating full-stack ownership from database design to user interface
- Built integrated modules: payment processing, service ticketing, paperless billing, SMS/email notifications, automated PDF/Excel reporting

Legacy System Modernization — Technology Migration Leadership (2025–2026)
- Led full-stack technology upgrade: PostgreSQL 9.3 → 16, JDK 7/8 → 17, Java → Kotlin, OpenXava 5.6 → XavaPro 7.x
- Executed enterprise ISP platform migration (daloRADIUS 0.9-9 → 2.2 beta) with **21,000 customer records** preserved
- Modernized infrastructure stack: CentOS 8 → Ubuntu 24.04, FreeRADIUS 2.x → 3.2.5, MySQL 5.1 → MariaDB 10.11, PHP → 8.3
- Applied AI-assisted development (Claude Code, Gemini) to accelerate migration planning and code transformation

Automated Service Provisioning — Internet & Telecom Real-Time Control
- Built custom provisioning engine integrating billing payment module with daloRADIUS/FreeRADIUS server for automated internet service management
- Automatic internet service disconnect for accounts with outstanding balances; instant reconnection upon payment confirmation
- Integrated with VoIP server (Asterisk) and RADIUS authentication for real-time service control
- Reduced manual intervention by 90%, improving operational efficiency and customer experience

Cloud Infrastructure & Business Continuity (2024)
- Established Digital Ocean cloud infrastructure for automated daily backups
- Implemented secure synchronization ensuring disaster recovery compliance

Parking Systems Solutions Engineer

Multiple Metro Manila Properties | Philippines | 2016 – Present

Delivered enterprise parking management systems across **40+ premier properties** including Ayala, Greenfield, and Alphaland portfolios.

End-to-End Solution Delivery
- Designed and deployed complete parking ecosystem: barrier control, QR/RFID readers, dispensers, collectors, POS terminals
- Developed sophisticated rate computation engine with flexible pricing configurations
- Built multi-building parking slot display system broadcasting real-time availability across properties
- Ensured BIR compliance for receipt generation and transaction audit trails

Recent Deployments & Enhancements (2023–2026)
- Delivered multiple new installations annually across Metro Manila
- Upgraded Android Mobile POS to version 13 with enhanced security (2025)
- Developed North Harbor Truck Scale system with multi-camera snapshot and barrier control integration (2025)

Notable Client Sites:
Ayala Properties (Circuit Mall, Vertis North, Alabang Town Center, Feliz Mall, 30th Mall, Serendra, 15+ locations) | Greenfield Properties (Greenfield Tower, Twin Oaks Place, SOHO Central) | Alphaland Southgate Mall | Sunlife Centre BGC | Torre Lorenzo

Telecommunications Infrastructure Specialist

Rural Telco Operators | Philippines | 1993 – Present

VoIP Infrastructure Replacement
- Migrated legacy central office telephone equipment to Asterisk-based SIP servers across 5 operators
- Supported **3,000+ active subscriber accounts** on the new VoIP platform
- Developed custom call computation engine handling inbound and outbound call routing with real-time CDR processing
- Integrated with billing systems for automated usage-based charging

Prepaid Systems Development
- Built prepaid call card platform for long-distance services
- Developed SMS-based prepaid Cable TV subscription system with automated activation

Client Portfolio:
TETCO (Surigao del Sur) | INTELCO (Laguna) | WSTI (Samar) | LUKTEL (Quezon) | Sultan Kudarat TelSys

Notable Operator Clients (Billing & Provisioning):
TETCO | MRDC (formerly Morning Star Cable TV) | INTELCO | LUKTEL | WSTI | RomblonCable

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Call Accounting Systems Engineer

Hospitality Properties | Nationwide, Philippines | Early Career

Deployed Call Accounting Systems (CAS) across major hotel and resort properties, automating guest telephone billing through PBX integration and real-time CDR processing.

Hotel CAS Deployments
- Implemented Call Accounting Systems integrating with hotel PBX infrastructure for automated guest call billing
- Configured CDR capture and processing pipelines for accurate per-room telephone charge posting
- Deployed across multiple premier resort and hotel properties nationwide

Notable Hotel Deployments:
Fort Ilocandia Resort | Manila Midtown Hotel | Cebu Midtown Hotel | Montebello Villa Hotel | Bluewater Maribago | Costabella Tropical Beach

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KEY ACHIEVEMENTS & METRICS

Achievement	Impact	Relevance to AI Solutions
₱250M annual billing processed	Enterprise-scale data handling	AI/ML data pipeline experience
31,000+ customers served	Large-scale system reliability	Production AI deployment readiness
3,000+ VoIP accounts migrated	Telecom infrastructure modernization	Complex system migration expertise

40+ parking installations	Multi-site solution delivery	Forward-deployed engagement model
98% codebase ownership	Full-stack technical depth	End-to-end AI solution capability
6 concurrent operator clients	Stakeholder management	Client-facing solution engineering
6 hotel CAS deployments	Hospitality systems integration	Multi-industry solution delivery

TECHNICAL PROJECTS

AI-Assisted Development Workflow | 2024–Present
Integrated Claude Code, Gemini, Codex, and DeepSeek into daily development processes for code generation, refactoring, migration planning, and documentation—achieving significant productivity improvements in legacy modernization projects.

Vehicle Recognition System | 2021
Developed car/motorcycle classification using TensorFlow and Python for vehicle counting applications. Demonstrates computer vision fundamentals applicable to AI solution contexts.

Contact Tracing Platform | 2020 (Prototype)
Designed three-app ecosystem (LGU enrollment, Resident QR, Establishment Scanner) with cloud data submission. Full-stack architecture including React Native mobile, Node.js backend, PostgreSQL database, Digital Ocean cloud.

EDUCATION

Bachelor of Science in Computer Engineering
Polytechnic University of the Philippines | Sta. Mesa, Manila

ADDITIONAL INFORMATION

Languages: English (Professional) | Filipino (Native)
Work Authorization: Seeking Singapore Employment Pass sponsorship

Relocation: Immediate availability for Singapore relocation
Notice Period: Negotiable

References and detailed project documentation available upon request.