

Kamil Ali Agrawala

Raleigh-Durham-Chapel Hill Area

kamil.agrawalla@gmail.com | (541) 953-8005 | [GitHub](#) | [LinkedIn](#)

Professional Summary

AWS Practice Leader and Software Architect with over 12 years of experience driving enterprise cloud adoption, open-source database modernization, and Go-To-Market (GTM) strategies. Proven track record acting as a trusted advisor to C-suite executives, providing unbiased, technically grounded architectural guidance that prioritizes customer outcomes. Deep expertise across the AWS ecosystem (ECS, RDS, Aurora, ElastiCache) and open-source data platforms (PostgreSQL, Redis), successfully migrating legacy monolithic workloads to highly optimized, scalable cloud environments. Highly skilled at serving as a "Super Expert" in pre-sales cycles, designing professional service offerings (migration assessments, cost optimizations), and leading technical initiatives that secured a \$20M annual contract and drove over \$40M in Annual Recurring Revenue (ARR). A strategic player-coach dedicated to building robust cloud practices, enabling sales teams, and fostering long-term customer growth through technical excellence.

Core Competencies & Technical Skills

- **AWS Ecosystem & Architecture:** AWS (RDS, Aurora, ECS/Fargate, ElastiCache, Lambda, EventBridge, API Gateway, S3, IAM, KMS).
- **Open-Source Databases & Data:** PostgreSQL, Redis, OpenSearch, Vector Databases, Relational & NoSQL Data Modeling.
- **Practice Leadership & GTM:** Pre-Sales Enablement, RFP & RFI Responses, C-Suite/CTO Relationships, Statement of Work (SOW) Creation.
- **Service Design & Customer Success:** Migration Assessments, Architecture Audits, Cloud Cost Optimization, Customer Advocacy, Delivery & Consumption Planning.
- **Engineering & Leadership:** Player-Coach Mentorship, Systems Design (Java, Python), Event-Driven Architectures (RabbitMQ), AI/RAG Pipeline Integration, OpenTelemetry.

Professional Experience

InvestCloud | Remote, US

Software Architect (AWS Pre-Sales & GTM Lead) | *July 2019 – March 2026*

- **Sales Enablement & The Technical Win:** Acted as the "Super Expert" Solutions Architect in pre-sales cycles, partnering with technical sales teams and C-suite executives (CTO, CPO) to align engineering strategy with customer needs. Drove the entire sales cycle—including leading technical responses for critical RFPs and

RFIs—securing over \$40M+ in Annual Recurring Revenue (ARR) for top-tier financial institutions.

- **AWS Ecosystem & Open-Source Database Modernization:** Championed the adoption of AWS managed services (Aurora, RDS, ElastiCache), serverless containerization (ECS, AWS Fargate, Docker), and RabbitMQ to optimize customer workloads. Provided unbiased architectural guidance, recommending self-managed open-source solutions (PostgreSQL, Redis) when dictated by cost, portability, or regulatory requirements.
- **Service Design & Cost Optimization:** Designed and packaged professional service offerings, including legacy-to-cloud migration assessments, architecture audits, and cost optimization reviews. Spearheaded GTM strategies that generated \$5M in mutual annual recurring savings for the firm and its enterprise clients.
- **Existing Customer Growth, Migrations & Governance:** Looked after the existing customer base by ensuring smooth transitions for clients actively migrating to AWS. Optimized existing AWS deployments for performance and cost, successfully cross-selling advanced platform capabilities, including high-volume batch processing and LLM-powered analytics (LangChain, Vector DBs). Leveraged AWS CloudFormation templates to automate repeatable deployments, providing strict version control and governance. Set up AWS Organizations and Organizational Units (OUs) to implement mandatory, preventive, and detective guardrails.
- **Practice Building & Player-Coach Leadership:** Managed, mentored, and scaled a globally distributed team of 10+ engineers. Established a high-performance engineering culture, executing individual career coaching while establishing robust AWS architecture standards across the organization.
- **Cloud Security & Compliance:** Architected multi-layered defense-in-depth security strategies ensuring comprehensive application, transport, and data-at-rest protection. Engineered network and edge perimeters utilizing Amazon API Gateway, Gateway Load Balancers (with GENEVE protocol), AWS WAF, VPC Network ACLs, and Security Groups. Automated credential lifecycles using AWS Secrets Manager to auto-rotate database passwords and AWS Certificate Manager (ACM) for TLS/SSL certificate rotation. Configured Amazon S3 Cross-Region Replication (CRR) utilizing Multi-Region Access Points (MRAP) for resilient global routing, and enforced strict object retention periods—including Governance, Compliance, and Legal Hold modes—to guarantee data immutability and adhere to SOC 2 and FIPS 140-2 standards.
- **Observability & Self-Healing Systems:** Implemented deep observability across the platform by utilizing OpenTelemetry to create custom spans and trace IDs, effectively tracking complex, distributed workflows. Integrated telemetry data with Amazon CloudWatch to configure automated alarms and trigger self-healing procedures,

ensuring maximum uptime and system resiliency.

InvestCloud | West Hollywood, CA

Lead Software Engineer (Data Platforms & Delivery Lead) | *November 2015 – June 2019*

- **Consultative Presales & Systems Engineering:** Architected and developed sophisticated, high-throughput financial data engines (OMS, PMS) tailored for Tier-1 banking clients. Worked directly with stakeholders to conceptualize and pitch a major platform application, securing a \$20M ARR contract with an estimated \$100M+ LTV by identifying a unique enterprise use-case and driving the GTM motion.
- **Data Estates & High-Scale Architecture:** Designed highly available algorithms and database architectures (PostgreSQL, Oracle) capable of managing millions of client accounts and processing massive volumes of financial records with near zero-defect production rollouts.
- **Monolith-to-Microservices Modernization:** Led the engineering delivery to decompose massive monolithic codebases into scalable microservices, primarily utilizing Java and Python. Heavily leveraged Docker and containerization platforms, employing the Strangler Fig and Branch by Abstraction patterns to systematically tackle large legacy systems. Mitigated migration risk by introducing a phased testing approach supported by an Anti-Corruption Layer (ACL), ensuring reliable data synchronization and federated analytics across multi-tenant environments.
- **Technical Mentorship & Execution:** Acted as the primary technical partner for internal engineering pods. Evaluated workload metrics, resolved complex technical roadblocks through hands-on debugging, and facilitated design reviews to maintain velocity and team alignment.

Early Career Experience

- **Mentor Graphics (Now Siemens):** Developed custom tracking, validation, and CGI scripting tools in Python and Perl. Semi-conductor industry knowledge.

Education & Certifications

- **Oregon State University** | Bachelor of Science, Electrical & Computer Engineering
- **AWS Certifications:** Actively pursuing AWS Certified Solutions Architect (Professional) to continuously validate expertise in scalable, secure hyperscaler infrastructure.

- **CodeSignal Professional Certifications (2026):** Introduction to RAG, LangChain Chat Essentials in Python, Document Processing and Retrieval with LangChain, Scaling up RAG with Vector Databases.