MARTY SPALLONE

Solutions Architect & Senior Software Engineer | Forward Deployed Engineering

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PROFILE

Hands-on Enterprise Solutions Architect and Senior Software Engineer who partners directly with business stakeholders to turn complex domain needs into scalable, working software. Translates business capabilities into solution designs and ADRs, builds rapid prototypes, and collaborates across application and platform engineering teams to deliver secure production systems on AWS and hybrid cloud. Combines hands-on Python and FastAPI development with platform integration, EKS, Kong, GitOps automation, and SRE practices. Currently builds agentic AI workflows with Amazon Bedrock and Strands Agents, backed by extensive C#/.NET experience and a strong record of modernizing mission-critical enterprise healthcare systems.

PROFESSIONAL EXPERIENCE

Founder / AI Architect & Principal Engineer

Resolve Solutions, LLC | Jan 2026 - Present

- Build JABO, a B2B CRM for field-service operations, with a Python/FastAPI backend on AWS and a single Flutter/Dart codebase for web, iOS, and Android. Automate infrastructure and application delivery with CloudFormation/SAM and GitHub Actions.
- Implement Ask JABO with Amazon Bedrock, Anthropic Claude, and Strands Agents, connecting business APIs with tenant isolation, server-side validation, and human approvals. Keep permissions, pricing, and business rules outside model reasoning. Broader AI capabilities include Amazon Bedrock AgentCore, RAG, vector embeddings and search with OpenSearch, and application data storage with DynamoDB.
- Designed, built, and published Resolve Reinvent, a mental wellness consumer SaaS application, to the Apple App Store and Google Play. Implemented a cross-platform Flutter client and Python/FastAPI backend on AWS serverless, integrating the OpenAI API for AI voice journaling, conversations, insights, and moderation. Built private and shared spaces for families and therapists, Apple HealthKit integration, and subscriptions.

CIGNA | ENTERPRISE APPLICATIONS, CLOUD & PLATFORM INTEGRATION

IT Principal, Staff Engineer & Architect Manager | Underwriting IT

Cigna | Mar 2020 - Mar 2026

- Provided architecture and technical direction for U.S. Group Medical Sales, Underwriting, Pricing, and Reporting applications with an overall annual spend of $24M, partnering with business, product, engineering, security, data, and cloud teams.
- Partnered with business leaders, product owners, enterprise architects, and engineering teams to translate business capabilities into solution designs, systems architecture, and delivery plans.
- Helped modernize large enterprise underwriting and rating systems across AWS, Kubernetes/EKS, and OpenShift, combining application changes with platform integration, container migrations, capacity optimization, and production readiness.

Cigna | IT Principal, Staff Engineer & Architect Manager (continued)

Mar 2020 - Mar 2026

- Architecture partner across enterprise AWS accounts and shared platforms representing more than $5M in annual cloud spend. Contributed to FinOps, workload right-sizing, and platform rationalization that reduced non-labor cloud spend by approximately 20%.
- Helped shape the architecture decision record (ADR) process with the architecture team; wrote and reviewed ADRs, evaluated designs and technology choices, and guided technical leads in applying enterprise standards.
- Guided and mentored onshore, offshore, and outsourced teams across requirements, design, development, testing, release, and production support, coordinating with platform, security, infrastructure, and operations teams.
- Designed AWS and hybrid cloud solutions spanning VPCs, subnets, IAM, WAF, Lambda, API Gateway, and RDS/Aurora PostgreSQL; integrated enterprise applications with cloud platforms using secure APIs and event-driven services.
- Designed secure enterprise API and platform integrations using Kong, Okta/OAuth, and AWS services, connecting application teams with shared identity, integration, and cloud platforms.
- Modernized iQuote into Contour, a next-generation underwriting, pricing, and reporting platform. Designed and built backend services enabling a Pega front end, using AWS services and Kubernetes.

PLATFORM DELIVERY, DEVOPS & TECHNICAL LEADERSHIP

- Provided architecture and engineering guidance for production AI/ML using Amazon Comprehend, predating recent generative AI work. Supported ADRs evaluating model alternatives, runtime costs, and integration tradeoffs to guide implementation within enterprise standards.
- Advanced CI/CD and GitOps practices using GitHub, Argo CD, Jenkins, Helm, and automated release pipelines; worked with platform teams on deployment standards and observability.
- Applied site reliability engineering (SRE) practices across observability, monitoring, load testing, and production support; used Dynatrace, OpenTelemetry, Prometheus, Splunk, and CloudWatch Logs for diagnostics and operational reporting.
- Built reporting services with a team to modernize Excel-based reports into branded documents using SmartCOMM Enterprise, custom AWS Lambda services, and Amazon Aurora PostgreSQL (RDS).
- Earlier NextGen work included ServiceNow proofs of concept and Proposal Services APIs in C#/.NET Core on OpenShift, Linux, and Docker, preceding the move to Contour with Pega and AWS.

CIGNA | SOFTWARE ENGINEERING & TECHNICAL LEADERSHIP

Architecture Manager / Technical Lead | Underwriting IT

Cigna | Mar 2010 - Mar 2020

- Technical lead and hands-on developer for iQuote, originally built on IIS and C#/ASP.NET, with later .NET Core services. Delivered underwriting, rating, pricing, and proposals using AngularJS, SQL Server, DB2, and REST APIs, with Boomi and Salesforce integrations.
- Led development across internal, offshore, and outsourced teams, with a focus on mentoring, team building, problem solving, and relationships with business and technology partners.
- Modernized .NET Core web applications, services, and REST APIs onto OpenShift/Kubernetes. Replaced legacy data access with EF Core/LINQ and introduced dependency injection.
- Built application CI/CD pipelines using GitHub, TFS, and Jenkins; developed Redgate proofs of concept and SQL Server migration automation to bring database changes into CI/CD.
- Designed and developed reporting services using Aspose.Total to produce client-facing and business-user reports and documents from underwriting and pricing data.

SELECTED EARLIER EXPERIENCE

Cigna Healthcare consulting, through Blue Object Software: Developed healthcare reimbursement (Cigna iSave) and payments modules using C#, ASP.NET, and DB2 before the Cigna roles listed above.

Pfizer: Solution architect and technical lead for clinical reporting and data warehousing using ASP.NET, SQL Server, and Oracle; built a reporting framework and optimized database queries.

Earlier systems engineering: Designed a C++/COM+ distributed load-balancing service for UPS, built real-time embedded C++ components for intelligent mailing systems, and developed network communications and desktop security software.

CORE TECHNOLOGIES & DOMAIN EXPERTISE

Engineering & DevOps: Python, FastAPI, C#/.NET, Flutter/Dart, JavaScript/TypeScript, SQL, REST APIs, automated testing, VS Code, GitHub Actions, Argo CD, Helm, GitOps, CI/CD, Docker, Kubernetes/EKS, OpenShift

AI & AWS: Amazon Bedrock, AgentCore, Strands Agents, Claude, OpenAI API, Gemini, RAG, OpenSearch (vector/semantic search), VPCs, subnets, Lambda, API Gateway, DynamoDB, S3, SQS, SNS, EventBridge, CloudFront, CloudFormation, CDK

Enterprise & data: ServiceNow, Boomi, Pega, Salesforce, SmartCOMM, Aspose.Total, Kong, Okta, RDS/Aurora PostgreSQL, SQL Server, DB2, Redis, graph databases, OAuth/OIDC, JWT, IAM; healthcare underwriting and PHI/PII protection

SRE & observability: Dynatrace, OpenTelemetry, Prometheus, Grafana, Splunk, Amazon CloudWatch Logs; monitoring, diagnostics, load testing, and operational reporting

EDUCATION & CREDENTIALS

M.S., Computer Science | Rensselaer Polytechnic Institute

B.S., Computer Science & Mathematics | Central Connecticut State University / UConn

AWS Certified Cloud Practitioner | Microsoft Certified Professional

Additional training: ServiceNow Fundamentals