

Jay Stuart

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Principal Architect | Engineering Manager

Results-driven Architect with 26+ years of experience leading cloud transformations and enterprise modernization initiatives for federal agencies including NOAA, HHS, CMS, FDA, VA, and IRS. Proven track record in delivering secure, scalable, and cost-efficient cloud-native solutions aligned with FedRAMP, FISMA, and NIST 800-53. Technical leader in cloud governance, Kubernetes, DevOps automation, and federal proposal development, securing over \$50M in contracts. Trusted advisor to government stakeholders and C-level executives.

Select Career Highlights

- Architected NOAA's future-state AWS cloud architecture, reducing cost and enhancing security and scalability.
 - Pioneered AI-assisted development practices to achieve 6x acceleration in enterprise application delivery, compressing multi-month timelines into weeks.
 - Led FDA's AWS migration of the MDSAP portal and consolidated document management systems.
 - Delivered FedRAMP-compliant cloud solutions at HHS and VA, aligning with NIST 800-53 & FIPS 140-2 increasing operational efficiency through strategic architecture alignment.
 - Spearheaded implementation of Karpenter for dynamic Kubernetes provisioning, reducing compute waste.
 - Contributed to technical proposals that secured over \$50M in new and re-compete federal contracts.
 - Mentored and led high-performing teams of engineers, fostering technical excellence and delivery.
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Certifications & Skills

Certifications: AWS Certified Solutions Architect, ITILv3, CMMI Level 3

Cloud & DevOps: AWS (EC2, EKS, ECS, RDS, S3, CloudWatch), Kubernetes, Terraform, Ansible, Docker, CI/CD, VPC, Karpenter

Security & Compliance: FedRAMP, NIST 800-53, FISMA, ATO, IAM, SSO, AD Integration, HIPAA

Languages & Tools: Python, JavaScript, PHP, SQL, Java, Bash, GitHub, Linux, PostgreSQL, MySQL, Mulesoft

Leadership & Delivery: Agile/Scrum, Cross-functional Team Leadership, Proposal Writing, Strategic Planning

Professional Experience

SAIC – *Principal Solutions Architect*

NOAA | 10/2024 – 10/2025

- Brought in to stabilize and mature a rapidly stood-up AWS environment that lacked governance, security baselines, and cost controls
- Led a team of cloud engineers in transforming an ungoverned environment into a **secure, scalable, and cost-efficient cloud platform**
- Established foundational **cloud governance**, including naming conventions, tagging standards, IAM guardrails, and operational policies
- Implemented **security hardening and vulnerability remediation practices** to improve ATO readiness in alignment with **NIST 800-53 and FedRAMP** requirements
- Defined patching cycles, hardened base images, and standardized operational behaviors across workloads
- Conducted cloud cost analysis and optimization, introducing **FinOps discipline** to address uncontrolled spend
- Architected environment segmentation, including VPC isolation and roadmap planning for **separate development environments**
- Authored a comprehensive **Cloud Handbook** to standardize access, deployment, and operational practices across teams
- Collaborated directly with NOAA stakeholders to align cloud modernization efforts with mission needs and long-term agency strategy
- Designed future-state architecture with **security, elasticity, and cost optimization** as first-class principles

Monarch Innovations – *Chief Architect / Software Engineering Manager*

Rockville, MD | 03/2021 – Current

- **AI Agent Governance & Autonomous Operations:** Designed and implemented a multi-agent AI engineering framework with role-based governance separating strategic planning from autonomous code execution, enabling safe, repeatable deployments across 8-phase validated pipelines with pre-flight checks, state persistence, and automatic rollback capabilities.
- **AI-Powered Self-Healing Test Automation:** Built an AI-driven self-healing test automation framework that autonomously analyzes test failures, identifies root causes, and repairs broken UI locators across iOS and Android platforms—reducing manual QA intervention and improving continuous delivery reliability.
- Architected and implemented cloud-native, containerized environments in AWS using Kubernetes, significantly enhancing operational efficiency and lowering costs.
- Accelerated enterprise cloud and mobile application delivery using AI-assisted development workflows, reducing time-to-market from 3 months to 2 weeks while maintaining production-quality standards.

- Serve as a trusted technical advisor to C-level executives, influencing key architectural decisions and shaping cloud strategy at the organizational level.
- Spearheaded initiatives to improve system performance and reduce operational costs through cloud-native solutions, balancing high availability, disaster recovery, and cost management to meet strict SLAs under budget.
- Led the development of technical proposals for NIH and HHS, delivering comprehensive system designs, budget forecasting, and resource allocation plans that directly contributed to winning new contracts.
- Hands on server installations/configuration/administration of various hypervisors including HyperV.
- Collaborated with industry stakeholders to establish dental- specific FHIR standards, advancing interoperability and regulatory compliance within healthcare.

Booz Allen Hamilton – Senior Lead Technologist

Laurel, MD | 08/2016 – 03/2024

- Served as technical lead for multiple **Federal RFP and re-compete efforts (HHS, FDA)**, shaping solution architecture and proposal content that contributed to **\$50M+ in awarded contracts**
- Led **digital transformation initiatives** across FDA and HHS, applying cloud-native architectures to modernize legacy systems and improve scalability, security, and operational efficiency
- Drove **FedRAMP and ATO readiness** for cloud solutions by implementing controls aligned with **NIST 800-53 and FIPS 140-2**, partnering with security and compliance stakeholders throughout the authorization lifecycle
- Architected and directed a **large-scale AWS implementation for HHS (AHRQ)**, ensuring regulatory compliance while designing for elasticity, resilience, and long-term sustainability
- Conducted regular executive-level briefings with government stakeholders, communicating delivery status, risks, and mitigation strategies to maintain alignment and trust
- Led adoption of **Agile delivery practices** at AHRQ (HHS), improving release velocity, predictability, and cross-team collaboration
- Architected enterprise modernization solutions and **led cross-functional teams of up to 20 engineers**, aligning technical execution with mission objectives and regulatory constraints
- Directed complex **on-premises-to-cloud migrations** for VA and HHS, integrating identity, access, and integration platforms (SSO, Active Directory, MuleSoft, AWS services) to enhance security and scalability

ActionNet – Technical Lead

Baltimore, MD | 10/2014 – 01/2016

- Delivered a knowledge management portal for CMS using Agile best practices. - Supported FedRAMP compliance initiatives, aligning systems with NIST and FIPS 140-2.

AT&T – Principal Architect
Annapolis, MD | 10/2005 – 02/2014

- Designed and developed high-throughput Java web services using Apache Axis (SOAP/WSDL), enabling enterprise system integration across AT&T's service delivery platforms.
 - Led Agile transformation and development of enterprise applications, improving release cadence and cross-team collaboration.
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Additional Experience

- **Technology Automation & Management Inc.** – Led architecture of Process Asset Library for DoD.
 - **SmartPants Media / Advertising.com / Performance Engineering / NYS Assembly /**
 - **Certified Reports** – Held software engineering and technical leadership roles across full SDLC, building secure systems in PHP, C++, COBOL, MySQL, DB2, and Visual FoxPro.
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Education

Albany State University – Double Major in Computer Science & Math
