Software Integration Engineer
Position Category: Full Time
Location: Remote (Washington, DC)
Clearance: Top Secret

Company Profile

Systems Thinking & Solutions (STS) is a technical services company. Our mission is to apply scientific methods to advance the capabilities and utility of engineered systems. Our core capabilities include Systems Engineering and Technical services, system architecture, system integration, modeling and simulation, IT support services, and technical program management. We are a Virginia corporation conveniently located near Washington, DC.

Position Overview

We are seeking an experienced Systems Engineer (or software engineer) to architect, design, and manage integrations between external applications and internal microservices-based architectures deployed in classified government cloud environments. This position will support programs at the Defense Advanced Research Projects Agency (DARPA) and other Department of Defense (DoD) agencies. The ideal candidate will have expertise in system interoperability, API development, model-based systems engineering (MBSE) and secure cloud integration. If you are passionate about integration engineering, cloud technologies, and solving complex challenges in secure environments, we encourage you to apply!

Core Responsibilities
- Collaborate with cross-functional teams, including DevSecOps, cybersecurity, and software engineering, to design and implement scalable, efficient, and secure integration solutions between third-party applications and internal cloud-based microservices architectures.
- Utilize Model-Based Systems Engineering (MBSE) principles to create SysML/UML models for system architecture designs and documentation.
- Define and document system requirements, interfaces, and behaviors using formal modeling techniques.
- Develop and document API specifications, data mappings, and integration workflows to ensure efficient and secure data exchange.
- Develop and perform system verification and validation tests.
- Troubleshoot and resolve integration-related issues to maintain system uptime and performance.

Requirements
- Proficiency using MBSE tools such as Cameo, MagicDraw, Enterprise Architect, or Innoslate.
- Proficiency using system modeling languages, and architecture frameworks.
- Knowledge of classified government cloud environments (AWS GovCloud, C2S, Azure Government, etc.).

- Knowledge of modern software integration and microservice architecture.
- Familiarity with message queuing systems (Kafka, RabbitMQ).
- Understanding of cross-domain solution requirements.
- Hands-on experience with microservices architectures, containerization (Docker, Kubernetes), and cloud platforms.
- Knowledge of Red Hat Enterprise Linux (RHEL) operating systems
- Experience with programming languages and frameworks such as Python, Java, JavaScript, C++, HTML/CSS, Apache, and Flask.
- Familiarity with software development tools such as Cylc, Jira, Bitbucket, Bamboo, Git, and Subversion.
- and response-handling
- Knowledge of application program interface (API) development (REST, SOAP, GraphQL) and middleware solutions.
- Excellent problem-solving skills and ability to work in a fast-paced, secure environment.

Qualifications
- Active Top-Secret clearance with ability to obtain TS/SCI.
- Bachelor's degree in systems engineering, Computer Science, or related field.
- 7+ years of experience in system integration, cloud computing, and software development.
- 3+ years of experience with MBSE practices and tools.

Preferred Qualifications
- Master's degree in Systems Engineering, Computer Science, or related field.
- INCOSE Certified Systems Engineering Professional (CSEP).
- Cloud platform certifications (AWS Solutions Architect, Azure Solutions Expert).
- Experience with cross-domain solutions.

Additional Information
- Must be a U.S. citizen.
- May require occasional travel.
- Position requires passing comprehensive background investigation.

Benefits
- Competitive salary based on experience.
- Comprehensive health, dental, and vision insurance.
- Retirement Plans: Safe Harbor 401(k), Profit Sharing, Cash Balance.
- Professional development and certification reimbursement.
- Paid time off and federal holidays.

STS is an Equal Opportunity Employer