ESD ID: ESD-16-1018

ESD Title: Software Engineer Level 4

Experience: 15 years, 11 years w/BS, 9 years w/MS

Clearance: TS/SCI w/FSP

Position: Virtual Machine Administration Expert

Position Specific Requirements:

- o Primary skills: Experience deploying cloud-based solutions in EC2, OpenStack API, libvirt, qemu-kvm. Manage and perform system administration supporting RHEL, CentOS or other popular *Nix-based operating systems. Develop software using Python, Java, PHP, JavaScript/JQuery. Requires advanced Linux skills.
- o Secondary skills: Core VMWare knowledge, Niagara Files (Ni-Fi), ServiceNOW. Write and refactor SQL queries in relational databases like PostgreSQL, Oracle.

Minimum Requirements:

- o 15+ years in software development and maintenance (i.e. software requirements analysis, software design including object oriented analysis and design, coding, testing, documentation, configuration management, user training, deployment, and lifecycle maintenance)
- o Documented formal training on the Software Engineering Institute (SEI) Capability Maturity Mdel Integration for Development (CMMI-DEV) Software model or documented experience working on projects and applied some portions of this model
- o Documented formal training on DoD standards for software testing and documentation or documented experience working on projects that applied these standards
- o 5+ years leading software development teams

Desired Requirements:

- o Designing and developing multi-tier Java web applications
- o Developing and validating user and system requirements, writing design documents, test plans and test results, and assessing architecture and current hardware limitations and recommending solutions
- o Designing and developing software and/or multi-tier web applications using programming languages to include: Java/Java EE, Swing, Hibernate, Spring, Struts, JUnit, C, C++, C#, .NET, Java Script, ColdFusion, and Adobe Flex development tools
- o Ability to develop and/or maintain software capabilities using C/C++ software development environment; Windows operating system internals, computer security, Win32 programming, Windows kernel programming, x86 assembly programming, COM programming, .NET programming, network programming (sockets), and software reverse engineering
- o Knowledge in using SQL or PL/SQL to access Oracle, MySQL, or SQL Server databases
- o Researching, selecting, and integrating, software frameworks (e.g. Ozone Widgets, Spring, Hibernate, Struts, and JUnit)
- o Ability to assist others in the use of Java APIs such as JDBC, JPA, and EJB
- o Ability to apply advanced principles, theories and concepts, such as Object Relational Mapping (ORM), Dependency Injection (DI), and Domain Driven Design
- o Ability to contribute to database design and to generate SQL queries and stored procedures
- o Ability to apply earned value techniques to software development, test, and maintenance efforts

- Working knowledge of and ability to assist others in the use of software engineering tools tp support process improvement to include ClearCase/ClearQuest, MS Project/Primavera, Subversion, Doors, Mercurial and Minitab
- 6+ years in network analysis (data and protocols) and TCP/IP and UDP protocols
- 6+ years malware analysis and mitigation techniques
- Experience working with Scrum or other agile software development processes
- Ability to utilize Eclipse, Microsoft Visual Studio, the Windows Driver Development Kit, IdaPro, Windbg, SoftIce, OllyDbg, VMWare, and Subversion to develop and maintain software capabilities
- Experience developing network capabilities using U123/U127, SOTF, Packet Capture, and Protocol Processing
- Working knowledge of and ability to implement IPv6 protocols