

ESD ID: ESD-16-1036

ESD Title: Software Engineer Level 4

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

Clearance: TS/SCI w/FSP

Position: Lead Rapid Prototyping Software Engineer

Responsible For:

- Developing for modifying existing software to satisfy critical mission needs in a rapid timeframe (within minutes to a week)
- Developing new analyst ideas into prototypes in short periods of time (1-10 days)
- Coming up with innovative new solutions to solve mission needs
- Providing technical task leading for the small development team

Position Specific Requirements:

- Have experience in a variety of languages and platforms (Most common languages are Python, Java, Javascript, Bash) (Most common technologies include SQL, JQuery, XML, elasticsearch, web-based APIs) (Most common platforms include RHEL/Centos 5/6/7, Windows Servers, and docker containers)
- Are willing to learn new things as needed (IE OJT) and work in a dynamic mission-oriented environment.
- Are okay with sacrificing perfection for speed (IE to strive for an 80% solution that can be done ASAP rather than expending a long development effort to get the software to 99% perfection)
- Enjoy the pressure / benefits of rapid development (and near-immediate feedback on the software developed by mission elements)
- Are able to work very independently and are self-motivated
- Are able and willing to do whatever technical tasks (other than programming) to get the job done (Ex: Install an OS, reconfigure a software firewall, build a .rpm, etc.)
- Have a solid understanding of networks and network protocols
- Have knowledge in some or all of these: Java, PHP, Python, Bash, Perl, and C/C++, C#
- STIX\TAXII\CYBOX Experience is an added benefit, but not required.

Minimum Requirements:

- 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)
- Documented formal training on the Software Engineering Institute (SEI) Capability Maturity Model Integration for Development (CMMI-DEV) Software model or documented experience working on projects and applied some portions of this model
- Documented formal training on DoD standards for software testing and documentation or documented experience working on projects that applied these standards
- 5+ years leading software development teams

Desired Requirements:

- Designing and developing multi-tier Java web applications
- 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
- 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

- 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
- Knowledge in using SQL or PL/SQL to access Oracle, MySQL, or SQL Server databases
- Researching, selecting, and integrating, software frameworks (e.g. Ozone Widgets, Spring, Hibernate, Struts, and JUnit)
- Ability to assist others in the use of Java APIs such as JDBC, JPA, and EJB
- Ability to apply advanced principles, theories and concepts, such as Object Relational Mapping (ORM), Dependency Injection (DI), and Domain Driven Design
- Ability to contribute to database design and to generate SQL queries and stored procedures
- 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 to 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