

#	POSITION TITLE	PROPOSED PREFERRED QUALIFICATIONS	PROPOSED POSITION DUTIES AND RESPONSIBILITIES
1	.Net Developer	Full-time professional work experience in the development and support of Information Technology applications. Successful completion of an Information Technology Certification program, accredited college and/or graduate training may substitute for the required work experience. Technical expertise in the following could be required: ASP.NET; C#; HTML; CSS; JavaScript; Entity Framework; SQL Server; Azure DevOps	Responsible for analysis, design, coding, component and assembly testing of all .Net application code owned by the Application Team. .Net Developers typically are involved in maintenance (including production support), enhancement and development work. .Net Developers have a range of skills and knowledge of the technologies used and applications supported by the Application Team. The Application Developer works with the Business Analyst, Application Architect and other Application Development Team members on an as needed basis to ensure that design and code meets customer requirements.
2	Application Developer	Full-time professional work experience in the development and support of Information Technology applications. Successful completion of an Information Technology Certification program, accredited college and/or graduate training may substitute for the required work experience.	Responsible for analysis, design, coding, component and assembly testing of all application code owned by the Application Team. Developers typically are involved in maintenance (including production support), enhancement and development work. Developers have a range of skills and knowledge of the technologies used and applications supported by the Application Team. The Application Developer works with the Business Analyst, Application Architect and other Application Development Team members on an as needed basis to ensure that design and code meets customer requirements.
3	Application Support Analyst	Full-time professional work experience in Information Technology.	Administers and maintains software infrastructures and applications. Collaborates with Application Developers and Software Engineers in the design and development new applications and improvement of existing applications. Runs application testing on designed programs, and provides accurate, quality analyses of new program applications.

4	Application Systems Analyst / Programmer	<p>Full-time professional work experience in Information Technology. Prior experience with various technologies and roles, including prior analysis, requirements gathering and formal modeling experience, but typically also has some prior experience in Programming languages such as JAVA, .NET, COBLAT, etc. Substitutions: Accredited college training may substitute for the required work experience. Successful completion of an Information Technology Certification program, may substitute for the required work experience with a maximum substitution of two (2) years. Two (2) years of work experience as an Application Systems Analysis/Programming-Specialist; Application Systems Analysis/Programming-Intermediate; Application Developer-Senior may substitute for all of the required experience.</p>	<p>The Application System Analyst analyzes user requirements, procedures, and problems to automate processing or to improve existing computer system: They confer with personnel of organizational units involved to analyze current operational procedures, identify problems, and learn specific input and output requirements, such as forms of data input, how data is to be summarized, and formats for reports. The Application System Analyst writes detailed description of user needs, program functions, and steps required to develop or modify computer program. The Application System Analyst/Programmer reviews computer system capabilities, specifications, and scheduling limitations to determine if requested program or program change is possible within existing system and then implements required changes.</p>
---	--	---	--

5	Architect	Experience in various technologies and roles, including designing, developing, and implementing application infrastructure to provide highly-complex, reliable, and scalable applications and systems to meet the organization's objectives and requirements.	Responsible for designing, developing, and implementing application infrastructure to provide highly-complex, reliable, and scalable applications and systems to meet the organization's objectives and requirements. Applications Architects are familiar with a variety of the application technologies, frameworks, environments, concepts, methodologies, practices and procedures, and rely on experience and judgment to plan and accomplish goals. Application Architects are able to perform a variety of complicated tasks with minimal or no direct supervision. They have proven experience defining systems and application architecture and provide vision, problem anticipation, and problem solving ability to organizations. They consult with the client to define needs or problems, conduct research, perform studies and surveys to obtain data, and analyze problems to advise on or recommend solutions, utilizing knowledge of theory, principles, or technology of specific discipline or field of specialization.
6	Artificial Intelligence ("AI") Architect	Experience with machine learning programming languages such as: Python, C++, JavaScript, Java, C#, Julia, Shell, R, TypeScript, Scala.	Develops artificial intelligence, machine learning, deep learning, and natural language processing algorithms. Designs artificial intelligence solutions to solve business problems. Implements complex data systems.
7	AI Engineer	Experience with machine learning programming languages such as: Python, C++, JavaScript, Java, C#, Julia, Shell, R, TypeScript, Scala.	Develops and utilizes simulations and models. Evaluates tools, technologies, architectures, models, and test results. Heads meetings regarding AI with external parties and internal business-embedded innovation teams. Collaborates with lead engineers to define subsystem requirements and acceptance criteria.
8	Big Data Architect	Proficient understanding of distributed computing principles; Proficiency with Hadoop v2, MapReduce, HDFS; Experience with building stream-processing systems, using solutions such as Storm or Spark-Streaming; Good knowledge of Big Data querying tools, such as Pig, Hive, and Impala; Knowledge of various ETL techniques and frameworks, such as Flume.	Designs and develops big data solutions. Analyzes data models to ensure they are efficient for developing proper analysis. Discerns customer requirements and confirms models address them.

9	Big Data Engineer	Thorough understanding of the underlying technologies that make up cloud computing: IaaS, PaaS and SaaS implementation. Skilled in exploratory data analysis or EDA to ensure ETL/ELT work and skilled in working with tools like SSRS, Excel, PowerBI, Google Looker, PowerBI etc. A big data engineer should be familiar with Python's libraries SciPy, NumPy, sci-kit learn, pandas, etc. Data engineers should be able to script in multiple languages.	Develops, engineers, maintains, runs tests, evaluates, and implements big data infrastructure, projects, tools, and solutions within an organization, working with the latest database technologies, in order to get results from vast amounts of data quickly. Selects and integrates big data tools and frameworks required to provide requested capabilities. Collects, stores, processes, manages, analyzes, and visualizes large sets of data to turn information into insights using multiple platforms; chooses optimal solutions to use for those purposes; maintains, implements, and monitors them; and integrates them with the architecture used across the organization.
10	Business Analyst	<ul style="list-style-type: none"> • Experience conducting Facilitated Workshops for requirements analysis. • Experience creating workflows using formal notation such as the Business Process Modeling Notation (BPMN). • Knowledge of formal requirements gathering methodologies. • Experience developing Business Requirements • Experience developing Functional requirements • Experience developing User (stakeholder) requirements • Experience developing Quality-of-service (non-functional) requirements • Experience developing Report Specifications • Experience developing Requirements Traceability Matrix 	Responsible for the set of tasks and techniques used to work as a liaison among stakeholders in order to understand the structure, policies, and operations of an organization, and to recommend solutions that enable the organization to achieve its goals. A Business Analyst primarily reviews, analyzes, and evaluates business systems and user needs.
11	Business Intelligence Analyst/Developer	Bachelor's degree in business, economics, information science or a related field. A Certified Business Analysis Professional (CBAP) certification through the International Institute of Business Analysis (IIBA) is a plus.	Analyzes data and processes to provide business intelligence information to management. Advises management on the content and interpretation of business data. Utilizes software to conduct analyses and manage data processes. Recommends alternative data or analysis solutions to management based on available data and business needs. Implements new data or analysis processes based on changing business or industry conditions.

12	Business Intelligence Architect/Developer	<p>Bachelor's degree in business, economics, information science or a related field. A Certified Business Analysis Professional (CBAP) certification through the International Institute of Business Analysis (IIBA) is a plus.</p>	<p>Provide expert guidance on Business Intelligence (BI) skills and technologies. Develop scalable and maintainable BI applications to meet business objectives. Develop security and authentication standards for the organization. Maintain accurate and complete technical architectural documents. Define BI standards, guidelines and best practices for business groups and technical teams. Support BI tools upgrades in development, testing and documentation.</p> <p>Perform maintenance and troubleshooting activities for BI tools. Diagnose and resolve BI tool capacity issues. Recommend strategies to improve performance and capacity of BI tools. Address customer queries and issues in a timely manner. Provide BI administration and technical support during weekends, after-hours and holidays when needed. Provide technical training on BI tools to junior staff. Collaborate with BI Administrators, Developers and Analysts for successful development of BI reporting and analysis solutions.</p> <p>Work with business groups and technical teams to develop and maintain data warehouse platform for BI reporting.</p>
13	Cloud Architect	<ul style="list-style-type: none"> • Knowledge and experience with some of the major CSPs (AWS, Azure, IBM & Google). • Experience designing IaaS, PaaS and SaaS architectures. • Knowledge of Service Registries and Cloud brokers. • Understands Stateful and Stateless services. • Knowledge of web services technologies- Restful services. • Understanding of distributed systems, databases and search systems. 	<p>Designs, develops, implements, utilizes, and conforms to enterprise cloud architecture application solutions, strategies, processes, and standards, focusing on expertise in cloud technologies. Collaborates with business owners, Analysts, Engineers, development teams, and infrastructure services to define, establish, and communicate application and data architecture standards, policies, and directions. Designs high quality architectures, and drives architecture activities that are aligned to organization requirements set by leadership on behalf of stakeholders and are consistent with enterprise architectural standards.</p>

14	Cloud Engineer	<ul style="list-style-type: none"> • Knowledge and experience with some of the major CSPs (AWS, Azure, IBM & Google). • Experience designing IaaS, PaaS and SaaS architectures. • Knowledge of Service Registries and Cloud brokers. • Understands Stateful and Stateless services. • Knowledge of web services technologies- Restful services. • Understanding of distributed systems, databases and search systems. 	Researches, designs, develops, runs tests, and evaluates systems that support cloud implementation and integrates with cloud service providers, applying principles and techniques of computer science, engineering, and mathematical analysis. Plans and conducts technical tasks associated with the implementation and maintenance of internal cloud enterprise-shared virtualization infrastructure. Develops and executes cloud solution roadmaps as they relate to business and executes company strategy to drive the achievement of business objective.
15	COBOL Programmer	<p>Knowledge and expertise of the following technical skills:</p> <p>Databases: MS SQL Server, Oracle RDB, and DB2</p> <p>Languages: Java, COBOL, TSO, JCSL, and CICS</p> <p>Platforms/systems: z/OS, Windows, Linux, UNIX, IBM Mainframe</p> <p>Tools: Endevor, Abend-aid, Xpediter, Rational, and Micro Focus</p>	A COBOL programmer is one who writes and works hands-on with a large-scale computer developing code in COBOL. A COBOL programmer will develop and maintain COBOL applications, test COBOL programs to catch errors and apply solutions to the faulty lines of the computer code responsible, document and file systems and enhance programs that are developed and implemented, gather and document system requirements, and fine-tune DB2 SQL queries.
16	CRM Architect	<p>Bachelors degree in Information Systems, Software Engineering or a related field. Experience with some or all of the following: C#, .NET, Competitors</p> <p>Business processes in BSS and OSS areas, CRM SDK, Defining CRM architecture and integration points in BSS environment, ETOM and framework.</p>	<p>Develops and designs requirements for the CRM system in consultation with multiple departments. Gathers technical requirements and concepts for the further development of technical requirements for the CRM system.</p> <p>Defines the business requirements for a scalable CRM infrastructure.</p> <p>Provides technical and professional servicing of the CRM system.</p>

17	Cyber Security Analyst	<p>Proven work experience as a Cybersecurity Analyst or similar role</p> <p>Experience in information security or related field</p> <p>Experience with computer network penetration testing and techniques</p> <p>Understanding of firewalls, proxies, SIEM, antivirus and IDPS concepts</p> <p>Ability to identify and mitigate network vulnerabilities and explain how to avoid them</p> <p>Bachelor's degree in computer science or related field is preferred</p>	<p>A trained cyberprofessional who specializes in network and IT infrastructure security. The cybersecurity analyst thoroughly understands cyberattacks, malware, and the behavior of cybercriminals, and actively seeks to anticipate and prevent these attacks. Develops and implements advanced cyber defense solutions and changes for organizations, safeguards the corporate infrastructure from infiltrations of exfiltration, and assures that the system is built to specification and is deployed successfully. Designs, maintains, and operates highly complex and high secure communications network environments. Performs in-depth network security analysis, and conducts preliminary incident response, event analysis, and threat intelligence. Reviews security events that could be a detriment to the organization's overall security stance.</p>
18	Cyber/Information Security Engineer	<p>A degree in computer science, IT, systems engineering, or related qualification. Must have an excellent understanding of technology infrastructures using Firewalls, VPN, Data Loss Prevention, IDS/IPS, Web-Proxy, and Security Audits. Must be comfortable working with a variety of technologies, security problems, and troubleshooting of the network.</p> <p>Proficiency in Python, C++, Java, Ruby, Node, Go, and/or Power Shell.</p>	<p>Cybersecurity engineers, sometimes called information security engineers, identify threats and vulnerabilities in systems and software, then apply their skills to developing and implementing high-tech solutions to defend against hacking, malware and ransomware, insider threats and all types of cybercrime.</p>
19	Data Administrator	<p>Full-time professional Information Technology Project Development work experience and/or Function/Business Process Analysis work experience.</p> <p>Substitutions: Accredited college training may substitution for the required work experience. Two (2) years of work experience as a Database Analyst-Senior ; Data Warehousing Administrator ; Data Architect ; Database Analyst-Intermediate ; Data Warehousing Analyst may substitute for all of the required experience.</p>	<p>It is the data administrator's responsibility to implement and execute data mining projects and makes reports to provide understanding into sales, marketing, and purchasing opportunities and business trends. The role would also include updating information to the company's database and official company website. Moreover, they also do reports about data analysis, forecasting, and other research activities that lead to decision making.</p>

20	Data Analyst	<p>Strong mathematical skills to help collect, measure, organize and analyze data; Knowledge of programming languages like SQL, Oracle, R, MATLAB, and Python; Technical proficiency regarding database design development, data models, techniques for data mining, and segmentation; Experience in handling reporting packages like Business Objects, programming (Javascript, XML, or ETL frameworks), databases; Proficiency in statistics and statistical packages like Excel, SPSS, SAS to be used for data set analyzing.</p>	<p>The Data Analyst assesses complex data systems and programs in support of ad-hoc and standing management or customer requests. Creates programs, methodologies, and files for analyzing and presenting data. Examines data quality, applications, and functions. Produces output and sustains operation. Researches new data sources and analytical tools. Contributes to new product development and improvement in product delivery and presentation. Develops awareness of and familiarity with issues and events affecting organization, department, and/or customer. Uses and supports database applications and analytical tools. Uses timely and appropriate participation of users/customers in data collection and query systems.</p>
21	Data Architect	<p>Proven work experience as a Data Architect, Data Scientist, Data Analyst or similar role In-depth understanding of database structure principles Experience gathering and analyzing system requirements Knowledge of data mining and segmentation techniques Expertise in SQL and Oracle Proficiency in MS Excel Familiarity with data visualization tools (e.g. Tableau, D3.js and R) Proven analytical skills BS in Computer Science or relevant field</p>	<p>Build and maintain a company's database by identifying structural and installation solutions. Work with database administrators and analysts to secure easy access to company data. responsibilities include:</p> <ul style="list-style-type: none"> - Translating business requirements into technical specifications, including data streams, integrations, transformations, databases, and data warehouses - Defining the data architecture framework, standards, and principles, including modeling, metadata, security, reference data such as product codes and client categories, and master data such as clients, vendors, materials, and employees - Defining reference architecture, which is a pattern others can follow to create and improve data systems - Defining data flows, i.e., which parts of the organization generate data, which require data to function, how data flows are managed, and how data changes in transition - Collaborating and coordinating with multiple departments, stakeholders, partners, and external vendors

22	Data Center Operation Control	Experience with various technologies and roles, including Mainframe, COBOL, tape archiving, JCL, IDMS, MVS/TSO, ISPF, NOC monitoring software.	Oversees the day-to-day management of all data center operations, policies, and procedures. Manages supervisors and operators engaged in inputting data into various storage media, manipulating existing data, editing data, and proofing new entries into database for accuracy. Interprets company policy to employees, and enforces company policies and practices. Analyzes and resolves work problems, or assists employees in solving work problems.
23	Data Center Operations/Administrator	Experience with various technologies and roles, including Mainframe, COBOL, tape archiving, JCL, IDMS, MVS/TSO, ISPF, NOC monitoring software.	Supports data center operations, working directly with the equipment, and utilizing knowledge of networking concepts, networking implementation, software concepts, and requirements in the testing and analysis of all elements of a data center facility. Maintains continuous operation of the equipment, including troubleshooting and repairing equipment failures, upgrading hardware, configuring new equipment, and monitoring the server, network performance, and operations. Assures that proper performance levels are sustained , that the network stays up and online, that data is accessible, that the processing and performance speed and power maintains efficiency at all times, and that downtime is kept to a minimum. Maintains documentation of daily operations; evaluates, analyzes, and documents critical data regarding the system's performance; determines what areas fall below efficiency standards, and addresses them.

24	Data Scientist	<p>Bachelor's degree (or equivalent) in statistics, applied mathematics, or related discipline.</p> <p>Proficiency with data mining, mathematics, and statistical analysis.</p> <p>Advanced experience in pattern recognition and predictive modeling.</p> <p>Experience with Excel, PowerPoint, Tableau, SQL, and programming languages (ex: Java/Python, SAS)</p>	<p>The Data Scientist collects and analyzes statistics and information from multiple sources to spot trends and to gain maximum insight that can give the company a competitive advantage, and communicates informed conclusions and recommendations across an organization's leadership structure. Strategizes and identifies unique opportunities to locate and collect new data, explores and mines data from many angles, and determines what it means. Communicates data findings to both business and IT leaders to influence how an organization approaches and meets business challenges of an evolving customer base and changing marketplace, using strong business acumen. Finds and recommends new uses for existing data sources; designs, modifies, and builds new data processes; and builds large, complex data sets.</p>
----	----------------	---	---

25	Database Administrator	<p>Experience in various technologies and roles, including Oracle, SQL Server, DB2 and other technologies related to Database administration and management. May require a bachelor's degree in a related area and 2–4 years of relevant experience.</p>	<p>The Database Administrator is responsible for data analysis and database management. Involved in maintenance, enhancement, designing of data dictionaries, physical and logical database models, and performance tuning. Knowledge of the utilities and production tools used for data storage management to support the Application Team. Coordinates physical changes to computer databases; codes, tests, and implements physical database, applying knowledge of data base management system. Designs logical and physical databases reviews description of changes to database design to understand how changes to be made affect physical data base. Establishes physical database parameters. Uses structured query language (SQL) to define database objects using database definition language (DDL) and control access to database objects using data control language (DCL). Calculates optimum values for database parameters, such as amount of computer memory to be used by database, following manuals and using calculator. Specifies user access level for each segment of one or more data items, such as insert, replace, retrieve, or delete data. Specifies which users can access data bases and what data can be accessed by user. Tests and corrects errors, and refines changes to database. Uses database utility programs and 3rd party utilities to monitor database performance, such as distribution of records and amount of available memory. Modifies data base programs to increase processing performance, referred to as performance tuning.</p>
----	------------------------	--	--

26	Database Analyst	<p>May require a bachelor's degree in a related area and 0–2 years of relevant experience. Full-time professional work experience in Software Development, Maintenance, or Implementation. Substitutions: Accredited college training may substitute for the required work experience. Successfully completion of an Information Technology Certification program, may substitute for the required work experience. Two (2) years of work experience as a Data Administrator ; Data Warehousing Administrator ; Data Architect ; Database Analyst-Intermediate ; Data Warehousing Analyst may substitute for all of the required experience.</p>	<p>Maintains data storage and access by evaluating, designing and implementing company database[s]. Identifies data sources, constructs data decomposition diagrams, provides data flow diagrams and documents the process. Writes codes for database access, modifications and constructions. Relies on established guidelines and instructions to perform daily job functions. Works under immediate supervision and usually reports to a manager.</p>
27	Database Architect	<p>Possess extensive knowledge of specific database systems, and is capable of hands-on work in all phases of database design and management. Experience in various technologies and roles, including database systems of any type and size.</p>	<p>Responsible for designing, developing, and implementing infrastructure to provide highly-complex, reliable, and scalable databases to meet the organization's objectives and requirements. The Database Architect is familiar with a variety of the database technologies, concepts, methodologies, practices, and procedures and relies on experience and judgment to plan and accomplish goals. The Database Architect is able to perform a variety of complicated tasks with minimal or no direct supervision. The Database Architect assists in defining system and application architecture and provides vision, problem anticipation, and problem solving ability to an organization. The Database Architect consults with the client to define needs or issues, conduct research, perform studies and surveys to obtain data, and analyze problems to advise on or recommend solutions, utilizing knowledge of theory, principles, or technology of specific discipline or field of specialization.</p>

28	Desktop Support Technician	Experience with various technologies and roles, including PC/laptop break/fix, HW/SW installation and configuration, scripting (i.e. PERL, SHELL).	Supports in-house teams and responds in person to helpdesk tickets. Responds to help desk tickets. Works with vendor support contacts to resolve technical problems with desktop computing equipment and software. Ensures desktop computers interconnect seamlessly with diverse systems including associated validation systems, file servers, email servers, computer conferencing systems, application servers and administrative systems. Builds and configure new user workstation equipment set (PC, desktop image, phone, peripherals, software, user accounts). Troubleshoots basic network, software, and printing problems
29	Developer	Full-time professional work experience in the development and support of Information Technology applications. Successful completion of an Information Technology Certification program, accredited college and/or graduate training may substitute for the required work experience.	Responsible for analysis, design, coding, component and assembly testing of all application code owned by the Application Team. Developers typically are involved in maintenance (including production support), enhancement and development work. Developers have a range of skills and knowledge of the technologies used and applications supported by the Application Team. The Application Developer works with the Business Analyst, Application Architect and other Application Development Team members on an as needed basis to ensure that design and code meets customer requirements.
30	EDI Specialist	Bachelor's degree in computer science or information technology and/or at least two years of hands-on experience working with EDI technologies.	Responsible for the design, development, and implementation of all EDI-related processes in a company or organization. EDI specialist is tasked with continuously checking the quality of EDI programs and applications, enhancing processes relating to electronic data interchange, and ensuring that processes are customized to flow within a company's business system.

31	Enterprise Architect	<p>Mastery level of experience that includes the capabilities of experienced Application Developers and Technical Specialists who have the knowledge, skills, education and prior experience that involves the full and complete design of software solutions. Experience in various technologies and roles, including work across Application Development, Service Delivery and Infrastructure to identify, research, discuss, design, and implement key architecture standards.</p>	<p>Works across Application Development, Service Delivery and Infrastructure to identify, research, discuss, design, and implement key architecture standards. Other responsibilities include: Research, design, document, build, and pilot prioritized topics for standards. Manage the list of potential standards and work with the application development management to prioritize efforts. Work closely with Development, Infrastructure, and Service Delivery teams to understand their needs and ensure the best standard is implemented. Work closely with development teams to pilot and prove out the standard. Drive the identification, development and implementation of key new standards in areas such as: Performance Testing, Security, Event Management, Web UI Framework, .NET Design Standards, Application To Application Communication, Caching, etc. Propose new standards based on business need, IT need and technology advances. Assist development teams to implement the standards into business applications. Investigate new technology and techniques that should be developed into an agency architecture standard.</p> <p>Leads key architectural design projects as necessary. Operate as business savvy technical leader across the organization. Influence development teams to design high-quality technical solutions that fit the Architecture and standards. Educate Application Development managers, Developers, and business analyst on State Architecture Standards.</p>
32	Help Desk Analyst	<p>Experience with various technologies and roles, including Tier 1-2 support, ticket/issue tracking software (i.e. Remedy), Automated Call Distribution (ACD) software, VPN, remote login software.</p>	<p>The Help Desk Analyst provides technical assistance to computer system users on a variety of issues. Identifies, researches, and resolves technical problems. Responds to telephone calls, email and personnel requests for technical support. Documents, tracks, and monitors the problem to ensure a timely resolution. Has knowledge of commonly used concepts, practices, and procedures within a particular field. Answer questions or resolve computer problems for clients in person, via telephone or from remote location. May provide assistance concerning the use of computer hardware and software, including printing, installation, word processing, electronic mail, and operating systems.</p>

33	Information Security Analyst	<p>Possess industry experience in the field of IT security. The ISA should possess working knowledge of IT Security Best Practices regarding networks and networking including protocol analysis, anomaly detection, and troubleshooting, and/ or working knowledge of IT Security Best Practices regarding Windows and *nix Servers and workstations required. Has experience with vulnerability assessment tools including but not limited to the following technologies; databases, web based applications, Windows and Unix file servers and data networks. Additional knowledge of information security standards and regulations preferred.</p>	<p>The IT Security Analyst monitors and advises on information security issues related to the systems and workflow at an agency to ensure the internal IT security controls for an agency are appropriate and operating as intended. Coordinates and executes IT security related projects for the agency. Coordinates response to information security incidents. Develops and publishes Information Security policies, procedures, standards and guidelines based on knowledge of best practices and compliance with Commonwealth IT Security policies, standards, and guidelines. Conducts campus-wide data classification assessment and security audits and manages remediation plans. Collaborates with IT management, Internal Audit, and VITA to manage security vulnerabilities. Creates, manages and maintains user security awareness. Conducts security research and keeps abreast of latest security issues. Prepares IT security documentation, including department policies and procedures, agency notifications, Web content, and alerts.</p>
34	Java Developer	<p>4-year college degree or equivalent technical study. Additional Qualifications and Skills:</p> <ul style="list-style-type: none"> • Web development using JSF framework. • Coding in JAVA/J2EE, Servlets, EJB, JDBC, JPA, JSF, JSP, JNDI, JAX-WS, JAX-RS, JAX-B • JAVA / J2EE Patterns • Object Oriented Design • HTML4, HTML5, XML, JAVASCRIPT, CSS • SOA, REST and SOAP Web Services • WebSphere Application Server, Rational Software Architect, Source Control • SQL, Database Knowledge 	<p>Responsible for analysis, design, coding, component and assembly testing of all Java application code owned by the Application Team. Java Developers typically are involved in maintenance (including production support), enhancement and development work. Java Developers have a range of skills and knowledge of the technologies used and applications supported by the Application Team. Works with the Business Analyst, Application Architect and other Application Development Team members on an as needed basis to ensure that design and code meets customer requirements.</p>
35	Machine Learning Developer	<p>Bachelor's degree in computer science or information technology or equivalent work experience.</p>	<p>Researches, develops, and implements machine learning algorithms for use in software and hardware applications. Maintains up-to-date knowledge of current technological standards, equipment, and practices. Identifies and suggests optimizations and features to improve hardware/software capabilities.</p>

36	Mobile applications developer	A bachelor's degree in Computer Science or relevant field and/or 3 years of demonstrable experience for mobile developers.	Designs, writes, develops and implements innovative and advanced mobile applications. Maintains and enhances existing applications. Responsible for translating code into user-friendly applications. They collaborate with internal teams to develop functional mobile applications while working in a fast-paced environment. Mobile developers develop application programming interfaces (APIs) to support mobile functionality while keeping up to date with terminology, concepts and best practices for coding mobile apps.
37	Mobile Specialist	Experience with various technologies and roles, including Mobile App Development, Security and/or Infrastructure Projects with Android and iOS systems. Programming may include native iOS, Android, Objective-C, Swift, JSON, webservices, UIKit, CoreData, hybrid app development, MDM etc.	The Mobile Specialist serves in many capacities, including Developer, Engineer, Technical Architect, and Analyst for Mobile Projects. The Mobile Specialist often guides and mentors the technical team in all phases of the SDLC including requirement validation, detail design, development, and implementation. Serves as the Designer, Developer and/or Engineer on Mobile Projects. Meets with end users and technical staff of all types to gather business and system requirements. Develops and/or engineers user interface, service tier, data tier components, infrastructure or security for Mobile Projects. Develops standards, repeatable processes, and reusable components Assists in project planning, including developing of timelines, composition of technical teams, and leveling of resources. Mentors technical team leads and team members on Department processes and standards to promote consistency and improve productivity.

38	Network Administrator	<p>Bachelor's degree in Computer Science or a related field</p> <p>2+ years experience in a network administration role</p> <p>MCSE certification a plus</p> <p>CISSP, CCNA, or CCNP certification a plus</p>	<p>The Network Administrator installs, configures, and supports an organization's local area network (LAN), wide area network (WAN), and Internet system or a segment of a network system. Maintain network hardware and software. Monitor network to ensure network availability to all system users and perform necessary maintenance to support network availability. May supervise other network support and client server specialists and plan, coordinate, and implement network security measures. Coordinate the development, implementation, and maintenance of a local area network or wide area network. Maintains the network's physical and logical structures, including network connections. Maintains network support software, analyzes user support statistics, and recommends appropriate measures. Installs, tests, and maintains network hardware and software. Prepares and analyzes statistics on network utilization and availability. Prepares training courses and provides user support and training in the use of available hardware, software, and utilities. Performs tuning and capacity planning activities to enhance the performance of the network resources.</p>
39	Network Engineer	<p>Experience with various technologies and roles, including Cisco, Avaya, Nortel, Routers, Switches, TCP/IP, BGP, Storage Area Network (SAN), CCNA/CCNP/CCIE certifications.</p>	<p>The Network Engineer is responsible for installing networking technologies and supporting networks. Assesses existing network configurations and makes recommendations based on product specifications. Configures equipment and software to meet business needs, trains others on the solution, and documents the solution for ongoing support. Functions as part of a team on larger projects, or individually provides the services on support visits or smaller projects. Provides technical support and assists with the design of network solutions. Requires experience in the technical services and support field as well as experience in network administration (DHCP, DNS, routers, firewall, etc.)</p>

40	Network Security Administrator	Bachelor's degree in Information Technology, Information Systems, or Computer Science. Previous network security experience and professional certification, such as the Certified Information Systems Security Professional (CISSP) are a plus.	Helps secure computer systems for a company, organization, or agency. Job duties may involve creating or updating security infrastructure and continually monitoring networks for unauthorized access or suspicious activities. Work with company staff members to help them stay connected and keep their work devices secure while they are online. May need to design and operate a training program that helps employees understand cybersecurity measures and best practices.
41	Network Security Architect	Windows and Unix system security experience Experience using Intrusion Detection Systems (IDS) and hardware and software firewalls Implementing various network access control systems such as Active Directory A bachelor's degree in computer science or a related field is also required and a master's degree in cybersecurity is preferred with one or two years in a cybersecurity role. CISSP and ISSAP certifications preferred.	Responsible for designing and overseeing the building and configuration of secure enterprise network systems. Responsible for analyzing network data and systems to select the most appropriate control mechanism for the security required. May also have a hand in selecting software and hardware used to apply the control system. Defines policies and procedures appropriate to the systems and help educate users and administrators. May have an ongoing role in auditing and supervising security levels specific to the systems designed.
42	Network Security Engineer	Complete and in-depth knowledge of network management & security technologies and approaches. (DMZ design, IPSec, proxies, RADIUS, Network intrusion detection sensors). 4 year college degree or equivalent technical study or advanced degree. Certifications such as CISSP, GISP, and CISM.	Responsibility for designing, implementing and supporting network security solutions for the organization. In collaboration with members of the Architecture and Engineering, Systems Administration, Database Administration, IT Development and Application Support teams, the Network Security Engineer will implement practical solutions to secure the States network infrastructure and ensure regulatory compliance requirements are met. This includes the on-going maintenance and management of hardware and software that secures the organization's network, analyzing and troubleshooting problems and monitoring for potential network security problems or incidents.

43	Oracle/PeopleSoft DBA	<ul style="list-style-type: none"> • Oracle DBA experience in all phases of Oracle/ PeopleSoft DBA support and Oracle/ PeopleSoft release upgrades. • Experience supporting Oracle Exadata is preferred. • Experience with Oracle 11g RAC, ASM and DataGuard is required. • Experience with Oracle 12c is preferred. • Experience with partitioning and advanced compression is preferred. • Must be able to perform database backup and recovery, exports, imports, cloning, database refreshes, database monitoring, performance tuning. • In -depth knowledge of Oracle databases and strong system level (Linux) and infrastructure (EMC or IBM SAN attached storage/RAID configuration, etc.) understanding. • Proficient in UNIX scripting. • Experience in resolving software integration problems. • Excellent analytical ability, strong consultative and communication skills. 	<p>The Oracle DBA will create, configure, monitor and administer the Oracle database environment. The DBA must be able to work independently to provide all aspects of Oracle database administration.</p> <p>Activities:</p> <ul style="list-style-type: none"> • Responsible for Oracle database design and support. • Perform capacity planning activities as related to database storage. • Assist in database performance monitoring, tuning and optimization. • Suggest and implement departmental standards and procedures for database administration. • Work with database vendors and external support on issues such as upgrades, technical problems and solutions. • Install and configure Oracle software and identify, perform and maintain software release levels, database patches and fixes as needed. Assist with database upgrades as needed. • Develop, test and implement backup and recovery strategy. • Follow change control and application deployment and access control procedures. • Develop database monitoring procedures and utilities. • Coordinate with other DBA team members on infrastructure enhancement or large development projects.
----	-----------------------	--	---

44	PEGA Lead Business Architect	4-year college degree or equivalent technical study; PEGA Senior Systems Architect Certification	Lead the business team in gathering requirements and choosing the best way to implement requirements leveraging the Pegasystem software and DCO capabilities. Understand business process and business requirements of the customers and translating them to requirements artifacts such as BRD/Functional spec/Use stories. Help to insure that the requirements management and facilitation best practices are adhered to include management of artifacts through traceability, version control and change control. Help to document business rules and assist with work type structure from the perspective of the business needs. Design and configure rules and flows and assist with the draft user interface and draft process flow development. Function as an Information Technology Business Analyst by understanding business requirements and transforming those requirements into data mapping specs. Effectively communicate with internal teams and clients to deliver user interface requirements like Graphical User Interfaces, Screen and Interface mock-ups. Understand interface /integration technologies and a good understanding of customers' needs so they can be translated into requirements.
45	PeopleSoft Functional Analyst	4-year college degree. Expertise in required PeopleSoft Modules and Technologies.	Provides support for the development, and implementation of the Oracle PeopleSoft Human Capital Management Modules for the program.
46	PeopleSoft Functional SME	4-year college degree. Expertise in required PeopleSoft Modules and Technologies.	Responsible for providing PeopleSoft functional support by acting as subject matter expert and leading the organization through the entire systems development lifecycle and production support.
47	Product Manager	Degree in technical fields such as engineering or computer science. An MBA and a complementary certification within product management is a plus.	Manages, plans and coordinates the development of new products, enhancements of existing products and technical solutions based on short-term and long-term needs. Determines reasonable roadmaps and deadlines for new products and product enhancements considering priority, customer needs, financial limitations, staffing requirements and availability of resources. Develops sales forecasts and implements pricing schedules that provide revenue and margins growth while remaining competitive in the market.

48	Product Specialist	Degree in technical fields such as engineering or computer science. An MBA and a complementary certification within product management is a plus.	Collaborates with business units in developing business plans and in designing, producing, launching, and advertising a company's products. Coordinates with engineering, manufacturing, marketing, and other cross-functional teams to provide marketing strategies, product development, management, and sales solutions. Oversees the materials, timelines, budgets, employees, and equipment needs; and assures the product meets specifications. Provides support for marketing sureties, advertising materials, marketing campaigns, tradeshow, television and radio ads, and other promotional activities, ensuring conformance to the imaging intended for promotion. Monitors short- and long-term product development and marketing.
49	Program Manager	Experience in various technologies and roles, including Agile, Waterfall or other SDLC methodologies. PMP/PMI certifications are preferred. Expertise with project management tools such as MS Project.	The Program Manager manages programs to ensure that implementation and prescribed activities are carried out in accordance with specified objectives. Plans and develops methods and procedures for implementing programs, directs and coordinates program activities to ensure project goals are achieved, and exercises control over personnel responsible for specific functions or phases of programs.
50	Project Manager	Experience in various technologies and roles, including Agile, Waterfall or other SDLC methodologies. PMP/PMI certifications are preferred. Expertise with project management tools such as MS Project.	The Project Manager designs, plans, and coordinates work teams. Follows standard project management industry practices such as the PMI's framework. Understands business and technical objectives of a project and works closely with project sponsor. Creates project charter and work plan and tracks budget and schedule progress via appropriate metrics. Establishes project organization and methodologies and defines roles and responsibilities. Documents risks and develops mitigation plans. Manages scope. Creates and implements a communication plan. Builds an effective team, assigns tasks to team members, and evaluates outcomes. Negotiates resources. Communicates to stakeholders and project sponsor. Identifies, tracks, and ensures resolution of issues and removal of barriers.

51	Quality Assurance Analyst	Degree in technical fields such as engineering or computer science or related work experience.	Conducts routine and non-routine tests using variety of testing devices and procedures to maintain product quality. Constructs and alters quality assurance test plans according to product specifications. Assists in the creation and maintenance of testing standard, processes and systems that align with industry standards. Develops, publishes, and implements test plans. Writes and maintains test automation. Develops, maintains, and upgrades automated test scripts and architectures for application products. Also writes, implements, and reports status for system test cases for testing. Analyzes test cases and provides regular progress reports. Participates in the testing process through test review and analysis, test witnessing and certification of software.
52	Quality Assurance Engineer	Degree in technical fields such as engineering or computer science or related work experience. Solid knowledge of SQL and scripting. Experience working in an Agile/Scrum development process.	Plans and directs activities concerned with development, application, and maintenance of quality standards for manufacturing processes, materials, products, and/or business systems. Develops and implements standards and methods for inspection, testing, and evaluation relative to the organization's quality management system. Assures compliance of organization's products and processes. Devises sampling procedures and designs and develops forms and instructions for recording, evaluating, and reporting quality data. Assures that products leaving the manufacturing or development organization are effective and free from defects or operational problems or errors.
53	Robotic Process Engineer	Degree in technical fields such as engineering or computer science or similar field. Excellent knowledge of CAD/CAM software.	Designs prototypes, builds and tests machines, and maintains the software that controls them. They also conduct research to find the most cost-efficient and safest process to manufacture their robotic systems. Creates applications or autonomous machines (aka robots) for industries such as mining, manufacturing, automotive, services and more. Often, the goal is to program machines to do repetitive, hazardous or unhealthy jobs.

54	RPA Solution Architect/Developer	Degree in technical fields such as engineering or computer science or similar field. Minimum 2+ years of RPA Developer experience. Experience with .Net, C#, and VB.	Writes and programs computer code and logic that can be processed by a computer and form the foundation of a robot's essential functions. Provides technical support when necessary to troubleshoot machine and software issues. Manages and maintains robotic programs and code. Designs an end-to-end RPA solution for different client queries. Define the architecture of RPA solutions. Design the flow diagram to simplify the understanding of architecture definition. Select/Suggest appropriate set of technology and tools to be used to build the solution. Understand the process end to end and document it as per understanding. Support each phase of RPA lifecycle right from "Requirement Gathering" to "Hypercare". Make sure the solution aligns with the enterprise guidelines.
55	Salesforce Developer	Bachelor's degree in computer science or software engineering. Extensive experience working with Salesforce CRM platforms. Advanced knowledge of Salesforce CRM platforms. Proficient in MYSQL, Apex, JavaScript, Native, and VisualForce. Working knowledge of mavenMate or eclipse.	Design, code, and implement Salesforce applications. Salesforce developers are responsible for developing customized solutions within the Salesforce platform to meet company objectives and provide scalable processes. Responsibilities: Meeting with project managers to determine CRM needs. Developing customized solutions within the Salesforce platform. Designing, coding, and implementing Salesforce applications. Creating timelines and development goals. Testing the stability and functionality of the application. Troubleshooting and fixing bugs. Writing documents and providing technical training for Salesforce staff. Maintaining the security and integrity of the application software.

56	SAP Specialist	Experience with various technologies and roles, including various SAP Modules and technologies such as : Human Resource Management (SAP HRM), Production Planning (SAP PP), Financial Supply Chain Management (SAP FSCM), Project System (SAP PS), Financial Accounting and Controlling (SAP FICO), etc.	Consults with client or management to solve complex business issues with a combination of packaged software, more efficient processes, and deep industry experience. Defines marketing, sales, and/or service needs or problems; acquires data through research, studies, and surveys; and analyzes problems and advises or recommend solutions to, utilizing knowledge of theory, principles, and/or technology of SAP (Systems, Applications, and Products in data processing) CRM (Customer Relationship Management) business software. Responsible for analysis, design, coding, component and assembly testing of all application code owned by the SAP Team. Reviews, analyzes, and modifies the programming systems including encoding, testing, and debugging to support an organization's SAP applications.
----	----------------	--	--

57	Scrum Master	<p>Bachelor's degree in computer science, information technology, or a relevant field preferred. Certified scrum master, SAFe preferred. 3+ years of experience as a scrum master or in a similar role. Working knowledge of agile methodology, techniques, and frameworks, such as Scrum or Kanban, to deliver solutions.</p>	<p>Facilitates and guides a software development product owner, team, and organization on how to use Agile/Scrum concepts, values, practices, and principles focusing on improving team effectiveness. Encourages getting work done without coercion, assigning, or dictating the work. Facilitates discussions and decision making, and assists in mediation of conflict resolution. Leads the team and guides them on how to get the most out of self organization. Gives support using a servant leadership style whenever possible, leads by example, and demonstrates value-add principles.</p> <p>Responsibilities:</p> <ul style="list-style-type: none"> -Using agile methodology values, principles, and practices to plan, manage, and deliver solutions. -Training, mentoring, and supporting scrum teams to follow agile values, principles, and practices. -Determining and managing tasks, issues, risks, and action items. -Scheduling and facilitating scrum events, meetings, and decision-making processes. -Monitoring progress and performance and helping teams to make improvements. -Planning and organizing demos and product/system testing. -Ensuring the proper use of collaborative processes and removing impediments for the scrum team. -Tracking project processes, deliverables, and financials. -Preparing and presenting status reports to stakeholders.
58	Security Administrator	<p>Bachelor's degree or higher in Cybersecurity or Computer Science. A professional certification such as CompTIA's security+ or the EC-Council's certified ethical hacker is preferred.</p>	<p>Develops, implements and maintains security standards, policies and procedures. Manages security user system, data entitlements, authorizations, access rights, account creation, and modifications across multiple platforms and applications. Designs and directs security audits and penetration tests to discover system vulnerabilities, documents results, and provides recommendations to minimize risks. Responsible for installing, administering and troubleshooting an organization's security solutions. They also write up security policies and training documents about security procedures for colleagues.</p>

59	Security Analyst	Bachelor's degree or higher in Cybersecurity or Computer Science. A professional certification such as CompTIA's security+ or the EC-Council's certified ethical hacker is preferred.	Plans and executes the protection of information found on company computers and data networks, utilizing understanding of computer and network security, including firewall administration, encryption technologies, and network protocols. Designs, develops and implements security plans depending on the company's needs and current threats. Installs, uninstalls, updates, and maintains various security programs that protect sensitive data using firewalls and data-encryption technology. Protects computer networks from cyber attacks, creates cybersecurity policies and practices for the entire organization, and documents security breaches.
60	Security Engineer	Bachelor's degree or higher in Cybersecurity or Computer Science. A professional certification such as CompTIA's security+ or the EC-Council's certified ethical hacker is preferred.	Oversees security plans and details security policies. Implements and designs security counter-measures to respond in the event of a security breach. Coordinates security rules and internal access authorization with IT Operations leadership and management. Configures and maintains user access and accounts.
61	SharePoint Architect	Bachelor's degree in Computer Science, Information Systems or another field plus extensive hands-on experience. 3+ years in SharePoint Administration and Architecture Design, Configuration and Implementation.	<p>Responsible for design and implementation of Microsoft's Sharepoint collaboration platform.</p> <ul style="list-style-type: none"> • Provide guidance in the application lifecycle including engineering, project planning, project management, architecture and design. • SharePoint Web Governance, testing and quality assurance, deployment and operations. • Successfully engage in the full lifecycle of Analysis, Design, Implementation and Support • Support the delivery of complex services, including supporting the work of colleagues. • Identify and develop new business opportunities and further develop existing client relationships.

62	SharePoint Developer	Bachelor's degree in computer science or software engineering. Previous experience as a SharePoint developer. Extensive knowledge of C#, ASP.NET, and .NET Frameworks. Familiarity with JavaScript, HTML5, CSS, XML, jQuery, SQL Server, and Web Services.	Responsible for configuring and customizing SharePoint systems according to company specifications, building scalable web applications, writing and modifying code, debugging software, and training staff. Responsibilities: <ul style="list-style-type: none">-Meeting with the design team to review website and application requirements.-Setting tasks and development goals.-Configuring the company SharePoint systems to specified requirements.-Developing new web components using XML, .NET, SQL, and C#.-Designing, coding, and implementing scalable applications.-Extending SharePoint functionality with forms, web parts, and application technologies.-Testing and debugging code.-Reviewing website interface and software stability.-Troubleshooting software issues.-Maintaining and updating SharePoint applications.-Providing systems training to staff and customers.
----	----------------------	--	---

63	Solutions Architect	<p>Bachelor's degree in information technology, software engineering, computer science, or related field. Proven experience in engineering and software architecture design. Previous project management experience is advantageous. In-depth understanding of coding languages (Java, JavaScript).</p>	<p>Manages Information Technology applications projects, including the design, development, and implementation of components of the IT architecture. Develops and explicates IT solutions based on the enterprise's strategic business or technical requirements. Develops and communicates architectural proposals for various projects and initiatives. Defines the approach for structuring each application, including determining appropriate use of technology solutions. Defines and validates technical requirements and architecture quality attributes. Responsibilities include gathering requirements and functional specifications, assessing the current software systems in place in order to identify areas in need of improvement, and overseeing development teams. Responsibilities:</p> <ul style="list-style-type: none"> -Building and integrating information systems to meet the company's needs. -Assessing the systems architecture currently in place and working with technical staff to recommend solutions to improve it. -Resolving technical problems as they arise. -Providing supervision and guidance to development teams. -Continually researching current and emerging technologies and proposing changes where needed. -Informing various stakeholders about any problems with the current technical solutions being implemented. -Assessing the business impact that certain technical choices have. -Providing updates to stakeholders on product development processes, costs, and budgets.
----	---------------------	---	---

64	System Administrator	Bachelor's degree in information technology, software engineering, computer science, or related field or relevant work experience.	The System Administrator is responsible for effective provisioning, installation/configuration, operation, and maintenance of computer hardware and software and related infrastructure. This individual ensures that system hardware, operating systems, software systems, and related procedures adhere to Commonwealth policies, standards, and guidelines. Responsibilities include systems administration engineering and provisioning, operations and support, maintenance and research and development to ensure continual innovation. Install new / rebuild existing servers and configure hardware, peripherals, services, settings, directories, storage, etc. in accordance with standards and project/operational requirements. Perform daily system monitoring, verifying the integrity and availability of all hardware, server resources, systems and key processes, reviewing system and application logs, and verifying completion of scheduled jobs such as backups. Perform regular security monitoring to identify any possible intrusions. Perform daily backup operations and regular file archival and purge as necessary. Create, change, and delete user accounts per request. Provide Tier III/other support per request from various constituencies. Investigate and troubleshoot issues. Diagnose and recover from hardware or software failures. Coordinate and communicate with impacted constituencies. Apply OS patches and upgrades on a regular basis, and upgrade administrative tools and utilities. Configure / add new services as necessary. Upgrade and configure system software that supports GIS infrastructure applications or Asset Management applications per project or operational needs. Maintain operational, configuration, or other procedures. Perform periodic performance reporting to support capacity planning. Perform ongoing performance tuning, hardware upgrades, and resource optimization as required. Configure CPU, memory,
----	----------------------	--	--

65	System Engineer	<p>Bachelor's degree in information technology, software engineering, computer science, or related field or relevant work experience.</p>	<p>Responsibilities:</p> <ul style="list-style-type: none"> -Manages and monitors all installed systems and infrastructure for the organization to be in line with company guidelines or SOP (standard operating procedure). -Defines customers' needs and functionality in a service development cycle. -Assists in the coordination of various teams testing and evaluating for the development of design and its implementation of the best output. -Installs, configures, and tests operating systems, application software, and system management tools. -Ensures the highest level of systems and infrastructure availability. -Implements warranty and support activities. -Evaluates the existing systems and provides the technical direction to IT support staff. -Plans and implements system automation as required for better efficiency. -Oversees the development of customized software and hardware requirement. -Collaborates with other professionals to ensure high quality deliverables within organization guidelines, policies, and procedures. -Deals with work process, optimization methods, and risk management tools in the given projects for the successful accomplishments according to the requirements of the stakeholders.
----	-----------------	---	---

66	Technical Writer	Bachelor's degree in information technology, software engineering, computer science, or related field or relevant work experience. Exceptionally proficient in the use of Microsoft Office tools.	The Technical Writer develops and maintains user and technical documentation and project process documentation for Application Teams. Understands the user's view of applications and /or technology and is able to put procedures in a logical sequence. The experienced TTW provides expertise on technical concepts of applications and /or user groups and structuring procedures in a logical sequence, due to a broad understanding of the applications. Ensures messages and terminology is consistent across all written materials. Identifies, creates, revises, and maintains documentation and templates needed by the Application Teams.
67	Tester	Bachelor's degree in information technology, software engineering, computer science, or related field or relevant work experience. Experience with various technologies and roles, such as HP UFT, HP Quality Center, Telerik, eggPlant, Selenium, TestingWhiz, TestComplete, Ranorex, Test Studio, along with manual testing activities.	Responsible for the design, pilot, and implementation of the software quality assurance review processes. They typically have a background in software development and testing. The Quality Assurance Tester will work with Application Teams during pre and post assessment periods. The Quality Assurance Tester is responsible to plan, schedule, execute, and document findings of the review. Quality Assurance Testers must have a detailed understanding of processes which support the software development lifecycle. Writes and maintains test automation. Develops, maintains, and upgrades automated test scripts and architectures for application products. Also writes, implements, and reports status for system test cases for testing. Analyzes test cases and provides regular progress reports. Participates in the testing process through test review and analysis, test witnessing and certification of software.

68	UI Developer-Designer	BS/MS in Human-Computer Interaction, Interaction Design, or related. Proficiency in Photoshop, Illustrator, OmniGraffle, or other visual design and wire-framing tools Proficiency in HTML, CSS, and JavaScript for rapid prototyping.	<p>Translates high-level requirements into interaction flows and artifacts, and transform them into intuitive and functional user interfaces.</p> <p>Responsibilities:</p> <ul style="list-style-type: none"> -Collaborate with product management and engineering to define and implement innovative solutions for the product direction, visuals and experience -Execute all visual design stages from concept to final hand-off to engineering -Conceptualize original ideas that bring simplicity and user friendliness to complex design roadblocks -Create wireframes, storyboards, user flows, process flows and site maps to effectively communicate interaction and design ideas -Present and defend designs and key milestone deliverables to peers and executive level stakeholders -Conduct user research and evaluate user feedback -Establish and promote design guidelines, best practices and standards
69	UX Developer	BS/MS in Human-Computer Interaction, Interaction Design, or related. Proficient in design software (e.g. UXPin, Balsamiq). Knowledge of HTML/CSS; JavaScript is a plus.	<p>Responsible for making applications user-friendly and intuitive to attract and retain customers. Studies the user experience and measures how easy it is to complete tasks in an efficient manner while improving ease-of-use capabilities through many different approaches. Responsibilities:</p> <ul style="list-style-type: none"> -Understand product specifications and user psychology -Conduct concept and usability testing and gather feedback -Create personas through user research and data -Define the right interaction model and evaluate its success -Develop wireframes and prototypes around customer needs -Find creative ways to solve UX problems (e.g. usability, findability) -Work with UI designers to implement attractive designs -Communicate design ideas and prototypes to developers -Keep abreast of competitor products and industry trends

70	Telecom Administrator	Bachelor's Degree in Computer Science, Information Technology or related field; Current CCNA; CCNP Collaboration; Experience supporting Cisco Unified Contact Center Express; Experience with installation, implementation, and support of SIP and PTSN services through ISP or other carriers; Experience with Cisco Emergency Responder.	Voice systems specialists who team up with customers, departments, and other technical staff to ensure the highest possible quality and efficiency from their networks. Manage and support telecommunications systems and networks, with duties that include configuring and deploying equipment, managing user access and rights, monitoring network performance and reliability, and implementing and maintaining security protocols. Telecom admins have a broad understanding of TCP/IP, UDP, FTP, VoIP, telephony systems, and general networking hardware and software that they use to perform their jobs. Must be able to work independently and as a member of a team, with excellent organizational and time management skills. Should have effective communication and interpersonal skills to use when supporting clients, stakeholders, and other team members.
71	Telecom Engineer	Bachelor's Degree in Computer Science, Information Technology, Electronics or Telecommunications. CCNA or CCNP are a plus.	Researches, develops, designs, and evaluates communications systems and equipment. Studies communications systems and equipment, such as present and projected volume of communications, effectiveness and adequacy of system, and estimated equipment costs. Performs engineering studies to obtain data on new equipment and systems developments in communications field and adaptability of equipment to existing system. Excludes supervisory and paraprofessional positions.
72	Telecom Technician	Bachelor's degree in computer science, electrical/electronic engineering, information technology, or another related field. Associate degree in a related technical discipline, or the equivalent combination of education, technical training or work experience. One to three years of related IT/telecommunications experience. Data Center/PoP/Central Office installation experience preferred. Prior experience with VOIP. Prior experience with SIP Trunking implementations. Experience with basic networking protocols including DNS, DHCP, VPNs, WAN/LAN TCP/IP.	Creates, starts implementation, installs, repairs, and maintains data, voice, and network communications systems, using hand tools and software and hardware testing instruments and techniques. Implements recommended equipment modifications and enhancements in accordance with user request and business objectives..

73	Network Technician	BS/BA in computer science, computer engineering or relevant field. CCENT/CCNA qualifications are strongly preferred.	<p>Responsible for designing and installing well-functioning computer networks and systems. They install internet connections and electronic cabling. They may also perform troubleshooting on system failures to maintain long-term efficiency within an area. Responsibilities:</p> <ul style="list-style-type: none"> -Design and install well-functioning computer networks, connections and cabling -Perform troubleshooting to system failures and identify bottlenecks to ensure long term efficiency of network -Inspect LAN infrastructure and fix minor or major problems/bugs -Test and configure software and maintain and repair hardware and peripheral devices -Evaluate network performance and find ways of improvement -Organize and schedule upgrades and maintenance without deterring others from completing their own work -Do regular data backups to protect the organization's information -Provide technical direction to co-workers on computer and network usage and offer comprehensive advice and instructions
74	Mainframe Systems Programmer	Bachelor's degree in computer science, electrical/electronic engineering, information technology, or another related field.	<p>Installs, customizes, and maintains the operating system for the mainframe, and also installs or upgrades products that run on the system. Responsible for managing the mainframe hardware configuration, and installing, customizing, and maintaining the mainframe operating system.</p>

75	Content Management Administration	<p>BS degree in Journalism, Marketing or relevant field.</p> <p>Proven work experience as a Content manager.</p> <p>Hands on experience with MS Office and WordPress.</p> <p>Basic technical knowledge of HTML and web publishing. Knowledge of SEO and web traffic metrics. Familiarity with social media.</p>	<p>Conceives and develops written and graphical content for website to provide information on products and services or entertainment to site visitors. Gathers information and integrates data from other departments to assist in determining the content of the website. Attracts visitors to the website by developing user interface and design standards, including improvement of features. This position is less technical than Webmaster or Web Developer because of lesser knowledge and responsibilities for site programming code. Responsibilities:</p> <ul style="list-style-type: none"> -Develop content strategy aligned with short-term and long-term marketing targets -Collaborate with marketing and design teams to plan and develop site content, style and layout -Create and publish engaging content -Edit, proofread and improve writers' posts -Liaise with content writers to ensure brand consistency -Optimize content according to SEO -Use content management systems to analyze website traffic and users engagement metrics -Manage content distribution to online channels and social media platforms to increase web traffic -Develop an editorial calendar and ensure content team is on board -Ensure compliance with law (e.g. copyright and data protection) -Stay up-to-date with developments and generate new ideas to draw audience's attention
----	-----------------------------------	---	--

IT	Application Technical Specialist	Could include advanced skills in technologies such as SharePoint , SAP, Curam, Service Now, HL7, PEGA, etc.	<p>The Application Technical Specialist is a senior level resource with specialized knowledge and experience in Specific Technologies. The Technical Specialist has an overall knowledge and understanding of application development and architecture that serves as a strong base for technical expertise in a specific product or program.</p> <ul style="list-style-type: none"> • Demonstrates expertise in conveying technical and functional concepts for a specific technical specialty. • Identifies improvements to project standards to achieve high quality services/ products. This is a professional position which may require subject matter expertise consistent with demanding and rare technological skills. • May require coordination of programming activities being conducted by the application development team • Confers with other business and technical personnel to resolve problems of intent, inaccuracy, or feasibility of computer processing and project design. • Works with necessary personnel to determine if modifications are necessary with interested personnel to determine necessity for modifications or enhancements. • Leverages excellent written and verbal communication skills to develop new business process and programming solutions as directed by business and technical stakeholders. • May coordinate activities of application developers. • Able to identify best practices and standards for the use of the product. <p>Identifies improvements to project standards to achieve high quality services/ products. This is a professional position which may require subject matter expertise consistent with demanding and rare technological</p>
----	----------------------------------	---	---

IT	Infrastructure Technical Architect	Could Include: various technologies and roles, including designing, developing, and implementing application infrastructure to provide highly-complex, reliable, and scalable applications and systems to meet the organization's objectives and requirements.	Responsible for designing, developing, and implementing application infrastructure to provide highly-complex, reliable, and scalable applications and systems to meet the organization's objectives and requirements. Applications Architects are familiar with a variety of the application technologies, frameworks, environments, concepts, methodologies, practices and procedures, and rely on experience and judgment to plan and accomplish goals. Application Architects are able to perform a variety of complicated tasks with minimal or no direct supervision. They have proven experience defining systems and application architecture and provide vision, problem anticipation, and problem solving ability to organizations. They consult with the client to define needs or problems, conduct research, perform studies and surveys to obtain data, and analyze problems to advise on or recommend solutions, utilizing knowledge of theory, principles, or technology of specific discipline or field of specialization.
IT	Business Subject Matter Expert	Could include: various technologies and roles, including SME in product and software or functional areas. This role encompasses working with Mid and Senior management and stakeholders in an organization.	Brings proven experience from related businesses or organizations as well as system integration and technology experience. They consult with the client to define needs or problems, conduct research, perform studies and surveys to obtain data, and analyze problems to advise and make recommendations on business and technical solutions based on hands-on experience solving similar business problems. They are able to utilize knowledge of theory, principles, or technology of specific discipline or field of specialization.

IT	Senior Consultant	4 year college degree or equivalent technical study or advanced degree. Certifications and degrees pertinent to the role being performed. Considered an SME in their field.	<p>The Senior Consultant is responsible for evaluating existing systems and/or new user needs to analyze, design, recommend, and implement information system changes. Consultants typically are familiar with a variety of the field's concepts, methodologies, practices, and procedures and rely on experience and judgment to plan and accomplish goals. Consultants are able to perform a variety of complicated tasks with minimal or no direct supervision. Defines system and application architecture and provides vision, problem anticipation, and problem solving ability to organization. Consults with client to define need or problem, conducts research, performs studies and surveys to obtain data, and analyzes problems to advise on or recommend solutions, utilizing knowledge of theory, principles, or technology of specific discipline or field of specialization.</p> <p>May lead and direct the work of others. A wide degree of creativity and latitude is expected. Typically reports to and/or receives strategic direction from an executive or a manager.</p>
IT	PEGA Developer	PEGA certification as a System Architect; working experience with PEGA Cloud; Experience creating data classes and properties in PEGA implementation; Broad experience in the PEGA rules-based architecture to configure and test applications functionality in process flow, UI screens, automated decisions and prosperities; Experience in Scrum development methodology	<p>Designs and maintains applications using PEGA to solve company needs. Collaborates with Business Analysts and to develop new systems and/or enhanced functionality utilizing the PEGA BPM platform and PEGA Cloud.</p>