Project Name: 5G

Post Code: 65

No. of Post(s): 6

Location: Delhi

Roles and Responsibilities:

- Development & testing of 5G SA core of small-scale enterprise network/ network in a box
- Testing multi-vendor solutions in 5G Campus network

Skills and Abilities:

- Proficiency in the C/ C++ language, Algorithms, Data Structures, Linux, multi-threaded system and scripting
- Good knowledge of IP networking
- Candidates having knowledge of 4G/5G protocols shall be preferred

Minimum Qualifications:

- Min 65% in (10th, 12th and BE/B.Tech in CSE/ECE) from a recognized college/university
- ME/M.Tech. (CS/EC) will be given preference

Eligibility Criteria:

Project Name: 4G/5G Core Network Development

Post Code: 66

No. of Post(s): 32

Location: New Delhi

Roles and Responsibilities:

- Analyze system requirements by studying standards
- Create technical specifications based on standard requirements
- Preparing architecture design of the system/module
- Defining the interfaces with other modules
- Detailed design of the system/module
- Exploring the new technologies more appropriate for the system/module
- Shall be able decide the databases more suitable for the system
- Create scalable design
- Produce clean, efficient code based on specifications
- Write testing stubs as per CI/CD
- Testing of the system
- Module/System integration testing with other modules
- Create Test Plans and reports
- Automated building and testing environment creation
- Work with other team members
- Troubleshoot, debug and upgrade existing software
- Gather and evaluate user feedback
- Recommend and execute improvements
- Create technical documentation for reference and reporting
- Debug coding problems quickly and efficiently to ensure a productive workplace

Skills and Abilities:

- Shall have experience on Mobile Technologies (4G/5G)
- Should have worked cloud based software development
- Should have good knowledge of CI/CD
- Shall have experience of protocol software development
- Shall have good knowledge of networking concepts
- Shall have good expertise in development of Internet Protocol based applications
- Prefer candidates having 4G/5G protocols
- Shall have experience of database oriented application development
- Should have experience of Management Interface development
- Preference would be given to candidates having containers based application development experience.

Experience working on large-scale software projects

Professional experience using cybersecurity and open source technology

- Experience developing software utilizing various coding languages including C/C++, Golang, rust, java, web technologies etc
- Outstanding collaboration and communication skills are essential
- Experience developing secure software systems based upon industry specifications
- Analyze code for weaknesses and errors, and improve them.
- Experience developing customized code for multiple projects simultaneously

Minimum Qualifications:

- Min 65% in (10th, 12th and BE/B.Tech in CSE/ECE from a recognized college/university
- ME/M.Tech(CS/EC) from a recognized college/university will be given preference

Eligibility Criteria:

Project Name: 4G/5G Core Call Processing Software

Post Code: 67

No. of Post(s): 5

Location: Delhi

Roles and Responsibilities:

- Identification and analysis of software requirements
- Design and Development of software application
- Unit testing, Test case automation and debugging of software
- Functional and Integration testing

Skills and Abilities:

- Programming Languages -C/C++
- Linux based application programming
- Scripting Languages -TCL, Python, JavaScript,
- Protocols -TCP/IP, UDP, IPC, SIP, RTP handling, Diameter and Socket programming
- Database -Relational and Non-relational databases
- Clarity of Networking concepts
- Knowledge of compilation and debugging tools
- Preferably knowledge of Cloud Infrastructure, SDN Concepts, Network function virtualization and DevOps methodology

Minimum Qualifications:

• Min 65% in (10th, 12th and BE/BTech in CSE from a recognized college/university

Eligibility Criteria:

Project Name: 4G/5G Software Application Development

Post Code: 68

No. of Post(s): 45

Location: Delhi

Roles and Responsibilities:

- Identification and analysis of software requirements
- Design and Development of software application, User, Web Interfaces
- Unit testing, Test case automation and debugging of software
- Functional and Integration testing

Skills and Abilities:

- Proficiency in programming languages, such as C/C++/Java/Python
- Expertise in Web/UI development using following technologies/frameworks
 - bootstrap
 - React
 - o javascript/jQuery/Ajax
 - Angular.js
 - HTML5
 - CSS
 - JSP with Struts
 - Python
- Good experience of using browser debugger tools like firebug or similar tools.
- Good knowledge of DOM structure.
- Good knowledge of hosting web applications on web server Tomcat/WildFly/NGINX.
- Should have worked with SOAP/JSON data serialization, XML,REST/OpenAPI.
- Knowledge of framework such as Netbeans, Eclipse, IntelliJ, SpringBoot/DJANGO
- Knowledge on Database MYSQL, PostgreSQL/ PSQL gueries/Big Databases
- Knowledge of working with GIT and Maven
- Knowledge of OpenStack, Kubernetes and Docker environment

Minimum Qualifications:

 Min 65% in (10th, 12th and B.E. / B. Tech In Computer Science / Information Technology/ Electronics) from a recognized college/university

Eligibility Criteria:

Project Name: 4G/5G Project Management

Post Code: 69

No. of Post(s): 4

Location: New Delhi

Roles and Responsibilities:

Project Requirement understanding and prioritizing

- Management of project activities and tracking via tool
- Training material preparation
- Generating quality documentation of project and maintaining document in repository

Skills and Abilities:

- Domain knowledge of 4G/5G protocols, architecture and network requirements
- Good analytical ability to understand customer requirement
- Skilled in technical writing
- Good communication skills
- Working knowledge of project management tools for creating project plans and generating various reports
- Good Knowledge of MS-Office tools

Minimum Qualifications:

 Min 65% in (10th, 12th and B.E. / B. Tech In Computer Science) from a recognized college/university

Eligibility Criteria

Project Name: 4G/5G Field Support

Post Code: 70

No. of Post(s): 40

Location: Delhi/Bengaluru

Roles and Responsibilities:

Field Support for 4G Rollout

Skills and Abilities:

- Candidate shall have experience of installation, deployment and support of different elements of 2G/3G/4G network
- Candidate shall have experience of working on Network management and troubleshooting.
- Hands-on experience of working on UNIX/Linux environment, shell scripting will be an additional advantage
- Candidate shall have experience of working on Cloud environment.
- Knowledge of Architecture of EPC & IMS as well as different Call flows in 4G/Volte Network
- Good grasp on different Debugging Tools like Wireshark, Tcpdump, Tethereal
- Knowledge of VOIP, SIP, Megaco, Diameter, MAP, GTP etc.
- Knowledge of Networking Protocols i.e. OSPF, BGP, ACL, MPLS etc.
- Comfortable with frequent Travelling/Field Visit at Customer sites
- Good verbal and oral communication skill

Minimum Qualifications:

• Min 65% in (10th, 12th and B.E. / B. Tech In Computer Science / Information Technology/ Electronics/ ECE) from a recognized college/university

Eligibility Criteria:

- 0-3 years of professional work experience post qualification.
- Experience of operation and maintenance/deployment in Field of Telecom and IP Networking will be given preference

Project Name: 4G/5G Lab Infrastructure and Test Setup

Post Code: 71

No. of Post(s): 04

Location: New Delhi

Roles and Responsibilities:

- Ensuring availability of necessary hardware and software and other lab equipment
- Addressing any issues relating IP Networking, Faulty cards, Data configurations, Software versions etc.
- Maintaining and provisioning testing equipment for the users
- DC Power Plants/battery Banks Maintenance, Power provisioning support in Labs
- Cloud Infrastructure Setup for 4G labs
- Installation of OS, Controllers, computes and launching of 4G nodes
- Layer-2 and Layer-3 related configurations, IP planning
- Orchestrating the cloud services
- Installation of K8 clusters and launching applications on K8
- Management of resources for the various applications on the cloud
- Implementation of new services/features/releases at the cloud level

Skills and Abilities:

- · Basic Knowledge of Networking and Cabling, Optical connectivity
- Strong IT skills, Creativity and Problem Solving
- Communicate regularly and be ready to learn new things.
- Be adaptable and flexible
- Knowledge of 4G, 5G, RAN equipment (eNodeB, gNodeB), switches and routers desirable

Minimum Qualifications:

• Min 65% in (10th, 12th,BE/B.Tech in Computer Science and Engineering or equivalent degree) from a recognized college/university)

Eligibility Criteria:

• 0-3 years of professional work experience post qualification. Preference will be given any cellular (2G/3G/4G) wireless deployment field experience

Project: M2M Applications Development

Post Code: 72

No of Posts: 2

Location: New Delhi

Roles & Responsibilities

- Design and Development of oneM2M compliant IoT head-end applications using REST API.
- Design and development of web application modules such as user Interface, reporting module, analytical module, graphical design etc
- Design and development of database, schemas for new features
- · Perform integrated testing of DB.
- Perform functionality testing, integrated testing w.r.t MVC web interface.
- Design, development, integration and testing of embedded applications on the field devices based on oneM2M standards
- Capture design specification in well documented requirement specifications and evolve appropriate systems architecture

Skills:

- Good Knowledge of
- C/C++, Python, HTML5/CSS3.
- Design and development of DTLS, TLS, Certificate based security, PSK
- Frameworks (Springboot, Eclipse, Arduino IDE, AngularJS)
- OpenCV, Keras, Tensorflow, NumPy, Django, Android Studio, SQLite
- XSD, JSON/XML (Storage of various types of data)
- Docker containers/Kubernetes
- oneM2M knowledge desirable
- Linux System, shell scripting
 - Java, JavaScript, jQuery, React, bootstrap, CSS, Angular.js, struts, jsp and Junit
 - Database (Mysql, Postgre SQL, Mongo DB) queries, normalisation, performance tuning etc.
 - In-Memory data bases
 - •OOPs concepts, Data structures and Algorithms
- Microservices, maven
- RESTful architecture
- Application and web server
- HTTP /CoAP/ MQTT

Minimum Qualifications:

 Min 65% in (10th, 12th and B.E. / B. Tech In Computer Science /Computer Engg/ Information Technology) from a recognized college/university

Eligibility Criteria:

Project: M2M Hardware integration and embedded software design and development

Post Code: 73

No of Posts: 1

Location: New Delhi

Roles & Responsibilities

- Design and integration of IoT field domain hardware involving sensors, actuators, microcontroller and microprocessor
- Perform functionality testing, integrated testing of the field domain nodes with CCSP (oneM2M compliant IoT platform)
- Design, development, integration and testing of embedded applications on the field devices based on oneM2M standards
- Capture design specification in well documented requirement specifications and evolve appropriate systems architecture
- Prepare product reports and documentation (Requirement specification doc, Systems diagram, Flowchart, Firmware architecture, Code documentation, etc.)

Skills:

Should have Good Knowledge of

- Embedded Hardware Design, Microchip PIC microcontrollers, AVR microcontrollers, NXP microcontrollers, Power Electronics, Analogue Circuits, Arduino, Raspberri Pi 3/4, Jetson nano, ARM Cortex Processor
- 3GPP technologies particularly NB-IoT and Cat M1
- HTTP /CoAP/ MQTT
- Java, Python, Embedded C & C ++, MongoDB, MariaDB
- Design and development of DTLS, TLS, Certificate based security, PSK
- IDEs like Arduino IDE and others
- XSD, JSON/XML (Storage of various types of data)
- Docker containers/Kubernetes
- oneM2M knowledge desirable
- Linux System, shell scripting

Minimum Qualification

 Min 65% in (10th, 12th and B.E. / B. Tech In Electronics and Communication) from a recognized college/university

Eligibility Criteria

Project Name: 4G/IMS and 5G (Validation)

Post code: 74

No. of Post(s): 20

Location: New Delhi

Roles and Responsibilities:

- In depth knowledge of Telecom products, knowledge of various interfaces used by these nodes as per 3GPP specification for IMS , 4G and 5G
- Should have practical experience of conducting validation of 4G/3G or IMS or any other core technologies.
- Field problem Simulation in lab
- Ability to identify problem and demonstrate the same to design team
- Preparation of various documents like Validation plan, User level document etc.
- Imparting training to field support team and customer
- Conducting field trail and validation testing in field.

Skills and Abilities:

- Experience of validation of telecom products
- Should have of well-versed with Integrations and interoperability activities
- Good knowledge and understanding of latest telecom technologies especially mobile networks. Should have in depth knowledge of 4G/5G and various interfaces and protocols as per 3GPP.
- Technical understanding of various telecom standards, interoperability and compliance requirements is required
- Excellent communicator, team player who can work independently also
- Scripting of test cases for automation
- · Excellent problem finding and debugging skills

Minimum Qualifications:

• Min 65% in (10th, 12th and B.E/B.Tech in Computer Science & Engineering or equivalent degree) from a recognized college/university.

Eligibility Criteria:

Project Name: 4G/5G IT and Networking support

Post Code: 75

No. of Post(s): 03

Location: New Delhi

Roles and Responsibilities:

- Configuration and Management of Servers, Workstations and PCs.
- System administration of Windows OS (Windows servers and Desktop versions) and Linux based systems (Ubuntu, RedHat, CentOS flavours).
- Working knowledge on cloud will be added advantage.
- Should have good understanding of network configurations. Experience in switch and router configuration is desired.

Skills and Abilities:

- Install, configure, update and maintain Windows and Linux based systems.
- Installation of software packages and related configuration for Client/Server and cloud setup.
- Regular update of Patches, Hot fixes, Virus signatures and updating of related software.
- Network and Security Configuration in servers / systems.
- Configurations and setup for Online meetings platforms: Zoom, Microsoft Meetings, Google Meet, Webex, GoToMeeting etc.
- Troubleshooting of day to day problems related to working of Servers / PCs / Network on different versions of Windows and Linux.

Minimum Qualifications:

• Min 65% in (10th, 12th, BE/B.Tech in Electronics & Communication Engineering / Computer Science or equivalent degree) from a recognized college/university

Eligibility Criteria: