

## Job Description

**Project Name:** a) POTP project,  
b) Smart Energy meter

**Post code:** 01

**No. of Post(s):** 2

**Location:** New Delhi

### **Roles and Responsibilities:**

- Research & development of appropriate ML algorithms to analyze huge volumes of historical data, make predictive analysis and automation as per project requirements
- Identify appropriate data sets, data collection and data modeling
- Statistical analysis of big data sets to improve models.
- Keeping abreast with the latest development in AI/ML
- Design & Development of quality software to enhance software reusability & scalability
- Code reviews and Release management

### **Skills and Abilities:**

- Experience of writing robust code in Python and R , NLP
- Familiarity with machine learning algorithms and use of AI/ML frameworks such as TensorFlow or Keras
- Working knowledge of NoSQL and RDBMS
- Knowledge of statistical & algorithmic models, fundamental mathematical concepts such as linear algebra and probability
- Knowledge of data structure & algorithms, object-oriented design principles and best practice patterns and code profiling.
- Familiarity with Linux environment for software development
- Knowledge of Smart Energy Meter (SEM), Head-end System(HES) and Meter Data Management(MDM)
- Knowledge of developing ChatBot shall be an added advantage
- Excellent problem solving and debugging skills
- Proficient in software version maintenance tools such as Git, SVN
- Excellent communicator, team player who can work independently also

### **Minimum Qualifications:**

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

### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

## **Job Description**

**Project Name:** a) POTP, b) NCCS, c) NPT, d) DOT website

**Post code:** 02

**No. of Post(s):** 4

**Location:** New Delhi

### **Roles and Responsibilities:**

- Research & development of appropriate ML algorithms to analyze huge volumes of historical data, make predictive analysis and automation as per project requirements
- Identify appropriate data sets , data collection and data modeling
- Statistical analysis of big data sets to improve models.
- Keeping abreast with the latest development in AI/ML
- Design & Development of quality software to enhance software reusability & scalability
- Code reviews and Release management

### **Skills and Abilities:**

- Experience of writing robust code in Python and R , NLP
- Familiarity with machine learning algorithms and use of AI/ML frameworks such as TensorFlow or Keras
- Working knowledge of NoSQL and RDBMS
- Knowledge of statistical & algorithmic models, fundamental mathematical concepts such as linear algebra and probability
- Knowledge of data structure & algorithms, object-oriented design principles and best practice patterns and code profiling.
- Familiarity with Linux environment for software development
- Knowledge of Smart Energy Meter(SEM), Head-end System(HES) and Meter Data Management(MDM)
- Knowledge of developing ChatBot shall be an added advantage
- Excellent problem solving and debugging skills
- Proficient in software version maintenance tools such as Git, SVN
- Excellent communicator, team player who can work independently also

### **Minimum Qualifications:**

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

### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

## **Job Description**

**Project Name:** a) POTP, b) NCCS(2), c) NPT

**Post code:** 03

**No. of Post(s):** 4

**Location:** New Delhi

### **Roles and Responsibilities:**

- Identify and analysis of software requirements
- Design, Development, testing and debugging of back-end software in Java
- Design & Development of quality software to enhance software reusability & scalability  
Design and development of API structure
- Coding, Code reviews, unit testing and Release management
- Integration of Software modules & System Integration testing
- Contribute to all phases of the development lifecycle and hands-on with distributed computing systems.
- Collaborating with the front-end developers to establish objectives and design functional, cohesive codes to enhance the user experience.

### **Skills and Abilities:**

- Hands on experience with programming languages like Java, JavaScript, PHP and Python
- Knowledge of Spring Boot, Spring Framework and understanding of Web Application framework (Express Framework)
- In-depth knowledge of data structure & algorithms and its application in software design & development
- Experience with container based application development and Troubleshooting, testing and maintenance of the existing software, including applications, databases, interfaces and new functionalities.
- Working knowledge of Relational Database (Knowledge of NoSQL database is an added advantage)
- Experience with Cloud Environments like AWS / Azure / GCP.
- Knowledge of Optical Link Validation, Network Planning Tool for WDM/POTP
- Architectural knowledge of handling millions of devices in HES of Smart Energy Meters
- Knowledge of Testing & debugging tool and version control system(GIT)
- Knowledge of web server configuration for Apache, Tomcat, Nginx.
- Excellent communicator, team player who can work independently also

### **Minimum Qualifications:**

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

### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

## Job Description

**Project Name:** a) POTP(2), b) NCCS, c) Smart Energy Meter

**Post code:** 04

**No. of Post(s):** 4

**Location:** New Delhi

### **Roles and Responsibilities:**

- Identify and analysis of software requirements
- Design, Development, testing and debugging of Web application software
- Web Performance optimization and development of quality components for speed, reusability and scalability
- Design & development of mobile based features
- Collaborate with back-end developers and web designers to improve quality & usability
- Implementation of data manipulation/ data binding through REST API
- Implementation of quality mockups and prototypes of User Interface
- Code reviews and Release management

### **Skills and Abilities:**

- Knowledge of Material UI , ReactJS , Redux , NPM ,bootstrap, JQuery
- In-depth knowledge of data structure & algorithms and it's application in software design & development
- Understanding of front-end framework
- Working knowledge of GIS integration
- Knowledge of Optical Link Validation, Network Planning Tool for WDM/POTP shall be an added advantage
- Architectural knowledge of handling millions of devices in HES of Smart Energy Meters
- Understanding of browser rendering behavior and performance.
- Knowledge of tools like ELK, Grafana, Elasticsearch
- Experience in dynamic website or portal and API integration
- Understanding of web application protocols.
- Knowledge of Web application security
- Knowledge of testing & debugging tool and version control system(GIT)
- Stay up-to-date on emerging technologies
- Familiarity with input validation techniques and approaches
- Excellent communicator, team player who can work independently also

### **Minimum Qualifications:**

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

### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

**Job Description**

**Project Name:** a) POTP(2), b) Smart Energy Meter

**Post code:** 05

**No. of Post(s):** 3

**Location:** New Delhi

**Roles and Responsibilities:**

- Identify and analysis of software requirements
- Design, Development, testing and debugging of embedded software, Linux device driver
- Design & Development of quality software to enhance software reusability & scalability
- Porting of Linux, U-boot, SDK on embedded systems
- Porting and Integration of third party and open source software stack
- Interface with hardware design and development
- Code reviews and Release management

**Skills and Abilities:**

- Solid programming experience in C/C++
- In-depth knowledge of data structure & algorithms and it's application in software design & development
- Understanding of Linux framework, RTOS and embedded system architecture
- Experience in embedded systems design with preemptive, multitasking real-time operating systems. Knowledge of working with SDK in cross-platform environment and understanding of cross-platform toolchains
- Working knowledge of board bring-up having microprocessors, microcontrollers, SoCs, device driver development and porting.
- Good understanding of communication protocols like SPI, I2C, PCI and UART
- Understanding of universal bootloaders(U-Boot). Knowledge of embedded file-systems(journalling flash file system)
- Experience with development of networking protocols (TCP/IP stack, routing, IPv4/IPv6, L2/L3 protocol, IPCs)
- Knowledge of code profiling and application containerization (application in embedded domain)
- Knowledge of building drivers for PowerPC processors T1022,P5040 shall be an added advantage. Proficient in software version maintenance tools such as Git, SVN
- Knowledge of Renesas RL78 family of MCU and ARM Cortex series of microcontrollers
- Knowledge of Broadcom switches Arad+ and Jericho shall be an added advantage
- Excellent problem solving and debugging skills, communicator and a team player.

**Minimum Qualifications:**

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

**Eligibility Criteria:**

• 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

## **Job Description**

**Project Name:** DOT/POTP/NCCS

**Post code:** 06

**No. of Post(s):** 1

**Location:** New Delhi

### **Roles and Responsibilities:**

- Investigating user experience design requirements for our products.
- Gathering and evaluating user requirements, in collaboration with product managers and engineers
- Illustrating design ideas using storyboards, process flows and sitemaps
- Developing and conceptualizing a comprehensive UI/UX design strategy.
- Producing high-quality UX design solutions through wireframes, visuals and graphic designs, flow diagrams, storyboards, site maps, and prototypes.
- Designing UI elements and tools such as navigation menus, search boxes, tabs, and widgets for our products.
- Testing UI elements such as CTAs, banners, page layouts, page designs, page flows, and target links for landing pages.
- Collaborating with the marketing team, and internal and external designers to ensure the creation and delivery of tailored experiences for users.
- Providing advice and guidance on the implementation of UX research methodologies and testing activities in order to analyze and predict user behavior.
- Identify and troubleshoot UX problems (e.g. responsiveness)
- Adhering to style standards on typography and graphic designs.

### **Skills and Abilities:**

- A portfolio of professional UI/UX design work for both web and mobile platforms.
- Expertise in Photoshop, Illustrator, and Adobe XD.
- Working knowledge of the following technologies and software: Sketch, InVision, Figma, Visio, HTML, CSS (SCSS), iOS, Android, Design Systems and Adobe Creative Suite.
- Excellent written and verbal communication skills.
- Multi-tasking and time-management skills, with the ability to prioritize tasks.
- Excellent communicator, team player who can work independently also

### **Minimum Qualifications:**

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

### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

## **Job Description**

**Project Name:** CEIR Project

**Post code:** 07

**No. of Post(s):** 2

**Location:** New Delhi

### **Roles and Responsibilities:**

- Operation and Maintenance of H/W and S/W Application based on telecom technology.
- Troubleshooting and escalation of H/W and S/W issue.
- Logging of maintenance activity and issues
- Customer Support.
- Troubleshooting and escalation of customer issue.
- Logging of customer issue.
- Collect feedback from customer

### **Skills and Abilities:**

- Good understanding of Linux and Shell Scripting, TCP/IP Networking, DBMS like MySQL, Web Technologies and Telecom technologies 2G/3G/4G.
- Good written and communication skill.
- Good problem-solving skill.

### **Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12th and B.E/B.Tech in Computer Science & Engineering/IT/ECE from a recognized college/university)

### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

### **Job Description**

**Project Name** : Lab set up for 5GRAN, 5GRAN Testbed, CCRC, NGV Flats renovation

**Post code**: 08

**No. of Post(s)**: 1

**Location**: Bengaluru

#### **Roles and Responsibilities**

- Must be well knowledgeable in preparation of specifications and estimations for any new construction / lab set-up activity
- Supervision of any construction activity in line with the approved Specifications
- Construction and maintenance of power and water supply systems in the Campus.
- Infrastructure management of the Campus
- Have good knowledge in Supervising carpentry, plumbing, sanitary and general campus maintenance activities

#### **Skills and Abilities:**

- Experience in any reputed company in civil related work like supervision of construction activities, coordination for preparation of estimates and specifications for civil work, moderate experience in supervising plumbing/carpentry work.
- Must have good working knowledge in English and MS Office tools like Word, Excel and PowerPoint
- Must be able to generate layout plans and drawings in coordination with AutoCAD Group

#### **Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> and B.E/B.Tech in Civil Engineering from a recognized college/university)

#### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification.



## **Job Description**

**Project Name:** NDMA CAP Integrated Alert System (DSA group)

**Post code:** 09

**No. of Post(s):** 3

**Location:** New Delhi

### **Roles and Responsibilities:**

- Experience/Knowledge of design, development and integration of web-based front-end applications.
- Experience/Knowledge of working with front-end technologies like – HTML, JavaScript and CSS.
- Knowledge of JS libraries like – jQuery, React JS etc. and CSS libraries like – Bootstrap, Materialize etc.
- Experience/Knowledge of interactive user interface developments.
- Knowledge of techniques for better user experience user experience.
- Basic hands-on on web-application development IDE (Eclipse/ NetBeans/ IntelliJ etc.) and hosting tools (web-app container, app-configurator).

### **Skills and Abilities:**

- Skills HTML, JAVASCRIPT, jQuery, CSS, Materialize, Bootstrap
- Worked on live portals, User experience strategies.

### **Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> B.E/B.Tech in Computer Science & Engineering/IT/ECE or equivalent degree from a recognized college/university)

### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

## **Job Description**

**Project Name:** NDMA CAP Integrated Alert System (DSA group)

**Post code:** 10

**No. of Post(s):** 5

**Location:** New Delhi

### **Roles and Responsibilities:**

- Experience/Knowledge of design, development and integration of web-based applications
- Experience/ Knowledge of MVC architecture and coding skills using object-oriented language like - JAVA.
- Knowledge of techniques for better user experience and optimized response time.
- Experience/Knowledge of Database Technologies like - PostgreSQL, MongoDB, writing optimized queries.
- Basic hands-on of web application development IDE (Eclipse/NetBea IntelliJ etc.) and hosting tools (web-app container, app configurator)

### **Skills and Abilities:**

- JAVA, SQL/No-SQL Databases.
- Knowledge of Spring and Hibernate framework will be preferred.

### **Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> , B.E/B.Tech in CSE/IT/ECE or equivalent degree from a recognized college/university. )

### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

## **Job Description**

**Project Name:** NDMA CAP Integrated Alert System (DSA group)

**Post code:** 11

**No. of Post(s):** 2

**Location:** New Delhi

### **Roles and Responsibilities:**

- Working knowledge in Android and iOS app development using React Native Framework.
- Experience with Android SDK and working with remote data via REST and JSON.
- Knowledge of iOS, iPad, C++, Objective C, iPhone SDK, Xcode, Swift and Cocoa Touch
- Work with Javascript, React Native for App Development
- Knowledge of UI development using XML
- Working knowledge of the general mobile landscape, architectures, trends, and emerging technologies
- Experience in live app operation, maintenance and update
- Publishing of mobile apps on Play Store and App Store

### **Skills and Abilities:**

- Javascript, Mobile App, iOS, Android, React Native.
- React Native Framework
- REST, JSON
- iOS, iPad, C++, Objective C, iPhone SDK, Xcode, Swift and Cocoa Touch
- Hosting App in Play store and App Store

### **Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> ,B.E/B.Tech in CSE/IT/ECE or equivalent degree from a recognized college/university).

### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

### **Job Description**

**Project Name:** NDMA CAP Integrated Alert System (DSA group)

**Post code:** 12

**No. of Post(s):** 2

**Location:** New Delhi

#### **Roles and Responsibilities:**

- Designing manual and automated test procedures to evaluate each software product.
- Building, coding, and implementing software evaluation test programs.
- Running test programs to ensure that testing protocols evaluate the software correctly.
- Completing final test and creating test reports.
- Presenting test reports to management and suggesting software fixes.
- Knowledge of tools like- jMeter, Selenium, junit, Bug management tools like – JIRA

#### **Skills and Abilities:**

- Automated testing skills and scripting, design test plan and test strategy, writing test cases, executing test cases, opening bugs, verifying bugs
- Mobile App, iOS, Android, React Native.

#### **Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup>, B.E/B.Tech in CSE/IT/ECE or equivalent degree from a recognized college/university.)

#### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

### **Job Description**

**Project Name:** NDMA CAP Integrated Alert System (DSA group)

**Post code:** 13

**No. of Post(s):** 2

**Location:** New Delhi

**Roles and Responsibilities:**

- Audit, assessment, and penetration testing techniques
- Experience with malware, Threat analysis and modelling, thorough understanding of attacks and threats
- Capability to influence others while adhering to a secure development lifecycle for a wide range of software products and technologies.
- Experience implementing security solutions that resolve security and business risk trade-offs
- An understanding of networking and communication protocols (such as TCP/IP, UDP, SSL/TLS, IPSEC, HTTP, HTTPS)
- Security vulnerability and threat analysis

**Skills and Abilities:**

- JAVA, C++, Linux architecture, Security Tools, OWASP Top 10 and CWE top 25
- Vulnerabilities
- An understanding of cryptography, web service frameworks, mobile application architectures, and service architectures (such as event-driven, service-oriented, or server less architectures).

**Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> ,B.E/B.Tech in Computer Science & Engineering/IT/ECE or equivalent degree from a recognized college/university).

**Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

**Job Description**

**Project Name:** NDMA CAP Integrated Alert System (DSA group)

**Post code:** 14

**No. of Post(s):** 2

**Location:** New Delhi

**Roles and Responsibilities:**

1. Experience/Knowledge of administration and troubleshooting for DevOps/Deployment, Orchestration Management, and Configuration Management
2. Deploying application into cloud using CI/CD
3. Continuous Integration and Continuous Deployment process using docker, jenkins etc.
4. Writing automation scripts to automate cloud deployment
5. Experience/Knowledge of in migration of conventional applications to the cloud
6. Experience/Knowledge of System Administration with Linux (Ubuntu, CentOS, RedHat)

**Skills and Abilities:**

- Linux administration, Load balancer setup, Database synchronization, SSL and Security certificate configuration
- Load Balancing, SSL over HTTPs, CI/CD, Certification in cloud domain

**Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> ,B.E/B.Tech in CSE/IT/ECE or equivalent degree from a recognized college/university).

**Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

**Job Description**

**Project Name:** a) 4G/5G testing/POC/deployment in Railways  
b) 4G/5G deployment in BSNL

**Post code:** 15

**No. of Post(s):** 15

**Location:** New Delhi/Kolkata

**Roles and Responsibilities:**

1. Installation, commissioning and day to day activities to be performed at office and various sites PAN India
2. System integration and testing in C-DOT lab and at various PAN India sites.
3. Interfacing with various government and non-government customers for resolution of issues coming in their network

**Skills and Abilities:**

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

**Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> ,B.E/B.Tech in CSE/IT/ECE or equivalent degree from a recognized college/university.

**Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

**Job Description**

**Project Name:** Wi-Fi Technology Enhancement and Rollout

**Post code:** 16

**No. of Post(s):** 02

**Location:** New Delhi / Bengaluru

**Roles and Responsibilities:**

Installation and Field Work for Wi-Fi

- RF survey and requirement finalization for any Wi-Fi deployment
- Installation of Wi-Fi solution, Network configuration with respect to TSP/ISP, Testing and Acceptance Testing as per the customer requirement.
- Provide support after installation.
- Training for operation and maintenance of network.
- Require extensive traveling for field deployment.

Call Centre and Certification Related Activity:

- To provide extensive support to PDOAs and APP providers in day-to-day operation and maintenance.
- 24x7 Call-Centre support through mobile operator
- Full-fledged Control Room / Helpdesk between 9 AM to 8 PM
- Certification of PDOA stack and APP along with the preparation of reports.

**Skills and Abilities:**

- Knowledge of IT and server-based system and fundamental of IP/LAN/Wi-Fi technology.
- Knowledge of remote installation and support to customer

**Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> ,B.E/B.Tech in ECE or equivalent degree from a recognized college/university).

**Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

**Job Description**



**Project Name:** Switch and Router support- R34 (NGN)

**Post code:** 17

**No. of Post(s):** 2

**Location:** New Delhi

**Roles and Responsibilities:**

- Managing Router lab and associated infrastructure
- Field support activities

**Skills and Abilities:**

- Knowledge of computer networking.
- CCNA certification/training preferable

**Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup>, B.E/B.Tech in ECE from a recognized college/university).

**Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

**Job Description**

**Project Name:** OCN Project: C04

**Post code:** 18

**No. of Post(s):** 6

**Location:** New Delhi

**Roles and Responsibilities:**

- Hardware board testing.
- Good analytical skills for hardware debug
- Handling sensitive instruments like oscilloscope, optical analysers etc.
- PCB Design exposure
- Should be able to work under minimal supervision.

**Skills and Abilities:**

- Microcontroller C coding, VHDL , Python scripting

**Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> , B.E/B.Tech in ECE from a recognized college/university).

**Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

**Job Description**

**Project Name:** TSOC Project

**Post code:** 19

**No. of Post(s):** 2

**Location:** New Delhi / Bengaluru

**Roles and Responsibilities**

1. Monitoring of Pan-India MPLS links and interaction with ISPs/TSPs and MPLS service providers.
2. Monitoring of Routers, configuration, replacement and interaction with vendor & C-DOT router team.
3. Probe application monitoring & servers troubleshooting, interaction with Hardware vendor, ISPs/TSPs and C-DOT development team.
4. Monitoring of Data Center Network & Security (Router, Firewall, Core & access switches for 400G Backbone covering 80 Racks).
5. Big-Data Platform comprising of following clusters with hundreds of nodes.
  - IPFIX Collector cluster
  - Kafka cluster
  - SPARK cluster
  - Logstash nodes
  - Elasticsearch application and storage Hot & Warm clusters.
  - Web based application nodes, Mongo DB etc.

**Skills and Abilities:**

1. Candidates having cybersecurity-related certification (e.g. Ethical hacking, Network forensic, Computer forensic etc.) shall be preferred.
2. Knowledge of shell scripting, Python scripting, Linux (CentOS/Ubuntu), Windows OS
3. Knowledge of TCP/IP Protocol, Routing Protocol as BGP, IPFIX protocol, DNS, DHCP, HTTP, HTTPS, SIP etc.
4. Knowledge of IP protocols, packet debugging tools such as Wireshark, tcpdump, ping, traceroute, Nmap, Hping etc.
5. Knowledge of ICT device configuration like Router, Switches, PC, Servers etc.
6. Knowledge of Big data Applications as Kaka, Spark, ELKstack, MongoDB, Hadoop etc.

**Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>TS</sup><sup>th</sup>, B.E/B.Tech in CSE/ECE or equivalent degree from a recognized college/university).

**Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

**Job Description**

**Project Name:**

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|-------------------------|
| a. QKD Software         |
| b. OAAS (GPON) Software |

**Post code:** 20**No. of Post(s):** 2**Location:** New Delhi**Roles and Responsibilities:**

- Development and testing of system software for various modules for optical access and quantum network management

**Skills and Abilities:**

- Proficiency in programming languages, such as C/C++/Python/Java, SQL.
- Deep understanding of Web application technologies such as gRPC, REST, container, docker, Kubernetes etc.
- Extensive experience in deploying, optimising and maintaining software.
- Excellent analytical and problem solving skills.

**Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup>, B.E/B.Tech in CSE/ ECE /IT or equivalent degree from a recognized college/university).

**Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

**Job Description**

**Project Name:**

a. QKD Software
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b. OAAS (GPON) Software
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**Post code:** 21**No. of Post(s):** 2**Location:** New Delhi**Roles and Responsibilities:**

- Design and development of switching and routing software. Working closely with the switch SDK to develop various L2 and L3 features for optical access devices.

**Skills and Abilities:**

- Proficiency in C/C++, shell scripting.
- Deep understanding of TCP/IP protocol stack, IPV4 and V6, switching and routing protocols.
- Experience of working on linux kernel and network layer.
- Excellent analytical and problem solving skills.

**Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup>, B.E/B.Tech in CSE/ECE /IT or equivalent degree from a recognized college/university.

**Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

**Job Description****Project Name:**

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- |                         |
|-------------------------|
| a. QKD Software         |
| b. OAAS (GPON) Software |

**Post code:** 22

**No. of Post(s):**2

**Location:** New Delhi

**Roles and Responsibilities:**

- Software application development for Linux environment :
- Design,Coding
- Unit & Integration Testing

**Skills and Abilities:**

- Programming Languages -
- C/C++
- Scripting Languages -
- TCL, Python, JavaScript, PHP.
- Protocols -
- TCP/IP, UDP, IPC and Socket programming.
- Database -
- Relational, Non-relational databases.
- Kaka, Rabbit MQ, NetConf, Concept of Microservices and Concept of Networking

**Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> ,B.E/B.Tech in CSE /IT or equivalent degree from a recognized college/university).

**Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

**Job Description**

**Project Name:**

a. QKD Software
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b. OAAS (GPON) Software
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**Post code:** 23**No. of Post(s):**1**Location:** New Delhi**Roles and Responsibilities:**

- Expect to participate in all phases of the optical product development cycle, from definition, design, documentation, implementation and testing.

**Skills and Abilities:**

- Proficiency in any one programming languages - C/C++, Python
- Knowledge of AI/ML for modelling and performance evaluation
- Deep understanding and experience of TCP/IP protocol stack, HTTP (S) and other protocols.
- Experience with Agile development methodologies and DevOps environments.
- Practical knowledge of system architectures and networking.
- Knowledge of databases
- Experience with version control such as git

**Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> ,B.E/B.Tech in CSE/ ECE /IT or equivalent degree from a recognized college/university).
- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

**Job Description**

**Project Name:**

a. QKD Software
b. OAAS (GPON) Software

**Post code:** 24**No. of Post(s):**2**Location:** New Delhi**Roles and Responsibilities:**

- Expected to work on Low level software such as boot-loaders, Linux kernel and configuration on various optical products.

**Skills and Abilities:**

- Proficiency in programming languages - C/C++.
- Practical knowledge of system architectures, networking and embedded systems.
- Embedded Linux development experience on ARM or other processes.
- Practical knowledge of BSP, Linux kernel, Linux Device Drivers etc.
- Experience with version control software git.
- Experience with device drivers for devices having I2C, SPI, UART, Ethernet, PCIe Interfaces.

**Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> B.E/B.Tech in CS/ ECE /IT or equivalent degree from a recognized college/university).

**Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

**Job Description**



**Project Name:**

1. QKD Software
2. OAAS (GPON) Software

**Post code:** 25**No. of Post(s):** 1**Location:** New Delhi**Roles and Responsibilities:**

- Responsibilities: Developing GUI for Network Manager of optical networks.
- Roles : GUI design, development and integration testing.

**Skills and Abilities:**

- Python, C++/Java, Database (relational, non-relational), Micro-service architecture, inter-process communication.
- Working knowledge of HTML, Javascript, CSS
- Working experience of frameworks React JS / Angular is preferred.

**Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup>, B.E/B.Tech in Computer Science from a recognized college/university).

**Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

**Job Description****Project Name:**

- |                         |
|-------------------------|
| a. QKD Software         |
| b. OAAS (GPON) Software |

**Post code:** 26**No. of Post(s):** 1**Location:** New Delhi**Roles and Responsibilities:**

- Responsibilities: Developing Server side web application for Network Manager to manage optical networks.
- Roles : Design, Development and integration testing

**Skills and Abilities:**

- Python, C++/Java, Database (relational, non-relational), Micro-service architecture, inter-process communication.
- Working knowledge of HTML, Javascript, CSS, NodeJS.
- Working experience of frameworks Django/Spring Boot is preferred.

**Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> ,B.E/B.Tech in Computer Science from a recognized college/university).

**Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

**Job Description**

**Project Name:** 4G LTE IMS CONVERGED CORE  
COMMERCIALIZATION IN BSNL NETWORK - R42

**Post code:** 27

**No. of Post(s):**2

**Location:** Bengaluru

**Roles and Responsibilities:**

- Development of packet/message processing application
- Testing and debugging

**Skills and Abilities:**

- C Programming
- Knowledge of Linux, shell scripting
- Knowledge of networking IPC, sockets
- Knowledge of compilation and debugging tools

**Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup>, B.E/B.Tech in Computer Science from a recognized college/university).

**Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

**Job Description**

**Project Name:** DEVELOPMENT OF 5G STANDALONE (SA) CORE - G05 code

**Post code:** 28

**No. of Post(s):** 2

**Location:** Bengaluru

**Roles and Responsibilities:**

- Platform s/w porting of embedded systems
- Tester s/w development and testing.
- Integration testing with h/w

**Skills and Abilities:**

- Knowledge of Embedded systems (Bootloader, OS etc.) with any prior testing experience (if possible)
- C programming
- Knowledge of Linux, shell-scripting
- Knowledge of compilation and debugging tools

**Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup>, B.E/B.Tech in Computer Science from a recognized college/university).

**Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

**Job Description**

**Project Name:** a) CMS Support- Testing for new services  
b) SAMVAD for LEAs  
c) IMPLN of LEAs

**Post code:** 29

**No. of Post(s):** 4

**Location:** Bengaluru

**Roles and Responsibilities:**

Electronic Provisioning and Interception Testing of new services launched / upgradation of their switch network by TSPs

- NG-PSTN,
- PSTN,
- ILD,
- IPLC,
- 4G LTE services,
- VoLTE with CMS at each LSA in coordination with respective LI vendor / TSP.

The above testing is to be performed for the following LSAs

- Tamil Nadu
- Madya Pradesh
- Odisha
- Gujarat
- Mumbai
- Andhra Pradesh
- Kerala
- Karnataka
- Maharashtra

LEMF systems are deployed at LEA site and the initial testing is expected to be carried out to enable smooth hand-over of LEMF system to LEAs.

**Skills and Abilities:**

Knowledge in Wire-less and Wire-line technologies

**Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> ,B.E/B.Tech in Computer Science/ECE from a recognized college/university).

**Eligibility Criteria:**

- 0-3 years of professional work experience post qualification.

**Job Description**

**Project Name:**

Quantum Key Distribution (including Measurement Device Independent Quantum Key Distribution which is a funded Project under NM-QTA as well as by NSCS)

**Post code:** 30

**No. of Post(s):** 1

**Location:** New Delhi

**Skills and Abilities:**

- Strong Theoretical Background in Quantum Communications / Quantum Mechanics
- Expertise in analysing QKD Protocols (& security proofs for the same) and support teams implementing the same
- Practical QKD implementation experience desirable
- Good understanding of various types of attack strategies on different QKD protocol implementations
- Should have thorough knowledge of Quantum Mechanics in general and all aspects related to Quantum Communications in particular
- Strong documentation and presentation skills; must be proficient in relevant software tools used in the same

**Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup>, BE/BTech in ECE or equivalent from a recognized college/university)
- M.E/M.Tech/MSc or Doctrate in Quantum Mechanics/ Quantum communication will be given preference

**Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

## **Job Description**

**Project Name:** TWDM-PON (under which 4G/5G Front-haul products are being developed)

**Post code:** 31

**No. of Post(s):**1

**Location:** New Delhi

**Skills and Abilities:**

- Experience in FPGA design, from low-level hardware description languages like Verilog/VHDL to high-level programming options like C, C++, and open computing language (OpenCL)
- Knowledge of Xilinx FPGA cards, and tools like Vivado for application development on FPGA, IP Core development and integration
- Experience of working on Optical Communication products desirable
- Strong digital design concepts as well as knowledge of Linux operating system
- Coding knowledge of C, C++, shell scripting, Python scripting
- Knowledge of Ethernet & other telecom protocols, error correction, privacy amplification, synchronization etc.
- Experience in handling lab instruments for debugging e.g. Mixed Signal Oscilloscope, signal generators etc.
- Experience in FPGA Timing closure
- Experience working with SoC based systems and knowledge of protocols such as SPI, UART, I2C, USB.
- Strong documentation and presentation skills; must be proficient in relevant software tools used in the same

**Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> B/E/ B.Tech.in ECE or equivalent from a recognized college/university)
- M.E/ M.Tech or equivalent in Electronics & Communication, Electrical, Instrumentation will be given preference.

**Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

## **Job Description**

**Project Name:** TWDM-PON (under which 4G/5G Front-haul products are being developed)

**Post code:** 32

**No. of Post(s):**1

**Location:** New Delhi

**Skills and Abilities:**

- Strong optical communication fundamentals
- Experience of designing optical communication products and handling of Optical Components
- Good theoretical and practical knowledge of optical devices used in Optical Communication and Quantum Communications
- Good Board design skills and proficiency in tools used for the same
- Strong analog design concepts and proficiency in tools used for the same
- Strong documentation and presentation skills; must be proficient in relevant software tools used in the same

**Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> ,BE/ B.Tech.in ECE or equivalent from a recognized college/university)
- M.E/ M.Tech. or equivalent in Electronics & Communication, Electrical, Instrumentation, Opto-electronics or Optical Communication will be given preference..

**Eligibility Criteria:**

- 0-3 years of professional work experience post qualification.



### **Job Description**

**Project Name:** 4G-LTE RAN and OCN project.

**Post code:** 33

**No. of Post(s):** 2

**Location:** Bengaluru /New Delhi

#### **Roles and Responsibilities:**

- Mechanical Production Support
- Inspection & Verification
- Trouble shooting
- Documentation of Technical Drawings

#### **Skills and Abilities:**

- Working Knowledge of SOLIDWORKS/AutoCAD/ProE
- Good written and communication skills.
- Good problem-solving skills.

#### **Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> , B.E/B.Tech in Mechanical Engineering from a recognized college/university)

#### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

## Job Description

**Project Name:** a) Data Center cloud infrastructure b) Network Security

**Post code:** 34

**No. of Post(s):** 2

**Location:** Bengaluru

### **Roles and Responsibilities:**

Implementation, configuration and commissioning of:

- Virtual infrastructure
- Windows domain infrastructure
- Critical network services
- Network security

### **Skills and Abilities:**

- Windows ADS & LDAP administration
- Linux server administration
- Network services setup and administration - DNS, DHCP, NFS, syslog, AAA
- Network devices - switches, routers, firewall configuration
- Network management
- Security implementation in end-points and network devices
- Hypervisor administration - Vmware ESXi, vCenter
- SAN administration
- Database administration
- Data center management practices
- Docker and kubernetes management
- Scripting skills with Shell, perl, python

### **Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup>, B.E/B.Tech in ECE or IS/IT from a recognized college/university

### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification.
- Preference would be given to candidates having industry certifications from:- Cisco, Vmware, Microsoft, Linux Professional Institute, RedHat etc

**Job Description****Project Name:** 4G RAN PROJECT**Post code:** 35**No. of Post(s):** 02**Location:** Bengaluru**Roles and Responsibilities:**

- Develop test procedures and strategies to carry out system testing
- Development of Validation plans for testing 4GRAN and 5GRAN systems
- Testing and Validation of 4GRAN,5GRAN systems
- Debugging and maintaining the 4GRAN,5GRAN systems
- Generating and Analyzing the Test Reports and Validation Reports
- Generation and Review of Specifications for 4G and 5G systems
- Review test result data to ensure that actual performance meets expected requirements
- Provide technical support in performing RF system testing
- Design test fixtures and develop and calibrate test equipment.

**Skills and Abilities:**

- Hands-on experience with RF equipment is an advantage (signal analyzers, oscilloscopes, signal generators, power meters)
- Knowledge of 3GPP specification is an advantage
- Experience in test automation (perl/python)
- Solid knowledge of 4G/5G standard, especially air interface
- Solid Knowledge on Antenna testing and debugging
- Moderate to Expert level knowledge Antenna subsystem of 4G / 5G Systems.
- Debugging and Analysing skills when facing problem with RF parameters or RF Set-up.
- Moderate to Expert level knowledge on 4G/5G Base Station RF Conformance tests.
- Knowledge on TEC specifications and 3GPP specifications.
- Moderate to Expert level knowledge on RF components like Attenuators, Adopters, cables
- Moderate knowledge of Test-Automation will be an added advantage
- Analyze and troubleshoot RF test equipment in a timely and accurate manner
- Understand customer requirements and accordingly prepare test specifications.
- Knowledge of UNIX/Linux environment and command line
- Understanding of technical documentation and technical writing skills

**Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> ,B.E/B.Tech in Electronics & Communication Engineering or equivalent degree from a recognized college/university)

**Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

## Job Description

**Project Name:** 5G RAN PROJECT

**Post code:** 36

**No. of Post(s):** 03

**Location:** Bengaluru

### **Roles and Responsibilities:**

- Design, Develop and Build Test Automation frameworks
- Design and Development of Test suites for the 4G and 5G system.
- Write, design, and execute automated tests by creating scripts that run testing functions automatically
- Maximize test coverage for the most critical features of the system
- Determine the priority for test scenarios and create execution plans to implement these scenarios

### **Skills and Abilities:**

- Comprehensive knowledge in the field of software development
- Knowledge of Artificial Intelligence / Machine Language
- Knowledge on Cloud computing, CI/CD tools like Jenkins
- Understanding the Industry Standards : 3gpp standards, Tec standards
- Moderate Knowledge on simulators : 2G/3G/4G node Simulators,UE simulators
- Moderate knowledge on Software testing tools: Wire shark, Scripting languages.
- Linux administration and Linux networking
- Programming expertise: High level languages C,C++,Java and Python
- Moderate knowledge on Databases: SQL, ORACLE etc.
- Knowledge on Andriod OS to Support Mobile-Telephone Automations
- Full stack developers for Test Automation of Validation Test Cases Execution, Configuration, monitoring and maintaining the Test Environment

### **Minimum Qualifications:**

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

### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

## **Job Description**

**Project Name:** 5G RAN PROJECT

**Post code:** 37

**No. of Post(s):** 03

**Location:** Bengaluru

### **Roles and Responsibilities:**

- Enable to the Hardware electronics systems and test equipment to integrate in Test Automation frameworks
- Design and Development of Test suites scenarios for the 4G and 5G system.
- Write, design, and execute automated tests by creating scripts that run testing functions automatically
- Maximize test coverage for the most critical features of the system
- Determine the priority for test scenarios and create execution plans to implement these scenarios

### **Skills and Abilities:**

- Comprehensive knowledge in the field of hardware development and testing
- Understanding the Industry Standards : 3gpp standards, Tec standards
- Moderate Knowledge on simulators : 2G/3G/4G node Simulators,UE simulators,Channel Emulators, Driver test tools and basic electronic system testing measuring tools
- Moderate knowledge on Software testing tools: Wire shark, Scripting languages.
- Linux administration and Linux networking

### **Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup>, B.E/B.Tech in Electronics & Communication Engineering or equivalent degree from a recognized college/university).

### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

## Job Description

**Project Name:** CAS-STB enhancement and support

**Post code:** 38

**No. of Post(s):** 1

**Location:** Bengaluru

### **Roles and Responsibilities:**

Shall be capable of working on

1. Android OS and its app development using Android SDK and Android Studio
2. REST and JSON.
3. Database
4. React, HTML, XML, JAVA, Kotlin and Gradle
5. UI development using XML and JSON
6. Android Interactivity and UI framework
7. Publishing of mobile apps on Play Store
8. Live app operation, maintenance and update

### **Skills and Abilities:**

1. JAVA 8 or above, Javascript ES6
2. Mobile App development, Android, React
3. REST Apps,
5. Hosting and maintaining Apps in play store

### **Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> ,B.E/B.Tech in CSE /IT/ECE or equivalent degree from a recognized college/university).

### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

## Job Description

**Project Name:** 4G Radio Access Network

**Post code:** 39

**No. of Post(s):** 4

**Location:** Bengaluru

### **Roles and Responsibilities:**

- Development of EMS Features
- Handling Integration activities
- Automation of test plans
- Migration of 4G EMS to 5G complaint EMS (Element Management System)
- Testing and Trials

### **Skills and Abilities:**

- Knowledge of Wireless Technologies, Computer Networking, Data Networking, Signal Processing
- Wireless network system architecture and subsystem design
- Testing and debugging tools
- Configuration Management, Scripting, Build and Development environment
- Able to work with Product integration and testing like functional testing, load testing, Stability testing, Regression testing etc
- Comfortable with organization processes
- C/C++ programming skills along with scripting.
- Unix Network Programming
- Data Structures and Algorithms
- JAVA Language
- Web Development ( JSP,JavaScript,AJAX, HTML,Application Server, Web Server
- Database (Knowledge of Oracle or MySql orPostgres)
- ORM Framework
- Framework (Sping Boot, Structs, BOOTSTRAP)

### **Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> , B.E/B.Tech in CSE from a recognized college/university).

### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

## **Job Description**

**Project Name:** 4G Radio Access Network

**Post code:** 40

**No. of Post(s):** 6

**Location:** Bengaluru

### **Roles and Responsibilities:**

Platform Software/ Firmware/ Operating Systems/ Drivers Development, Testing and Trials

### **Skills and Abilities:**

- Knowledge of Wireless Technologies, Computer Networking, Data Networking, Signal Processing
- Wireless network system architecture and subsystem design
- System Engineering Aspects,
- Testing and debugging tools, Signal generator/analyzers, Logic Analyzers
- Configuration Management, Scripting, Build and Development environment
- Able to work with Product integration and testing like functional testing, load testing, Stability testing, Regression testing etc
- Comfortable with organization processes
- Processors, Devices, SoCs, FPGA, on-board devices and interface devices.
- Operating Systems, distributions, packaging, devices, kernels, device drivers, data plane development, uboot, compilation, linking, loading
- C/C++ programming skills along with scripting.
- Power-on self-test.

### **Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup>, B.E/B.Tech in CSE /ECE from a recognized college/university).

### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.



## **Job Description**

**Project Name:** 4G Radio Access Network

**Post code:** 41

**No. of Post(s):** 6

**Location:** Bengaluru

### **Roles and Responsibilities:**

RAN/RRH related development in FPGA, System level testing, and Trials

### **Skills and Abilities:**

- Knowledge of Wireless Technologies, Computer Networking, Data Networking, Signal Processing
- Wireless network system architecture and subsystem design
- Computer Architecture, Digital Logic, Processor/FPGA/SoC interfacing
- Knowledge in hardware design (Circuit Design and Analysis, PCB, Devices, Signal and power integrity, interface with CAD/VDG/EPG)
- Expertise in FPGA Development – Tools for FPGA development, Timing analysis, Languages (VHDL/Verilog), Simulation, Modeling, Programming
- Matlab and Simulink and equivalent tools
- Ability to learn and use RF analysis and design tools
- Testing and debugging tools, Signal generator/analyzers, Logic Analyzers
- SDR concepts, Waveforms, Digital Filters, Interfacing with IP from other vendors.
- Knowledge of industry standards, standardization
- Comfortable with organization processes
- Good understanding of 3GPP wireless standards

### **Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup>, B.E/B.Tech in ECE from a recognized college/university).

### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

## **Job Description**

**Project Name:** 4G Radio Access Network

**Post code:** 42

**No. of Post(s):** 6

**Location:** Bengaluru

### **Roles and Responsibilities:**

RRH Analog & RF Hardware and System Level Testing, Trials

### **Skills and Abilities:**

- Knowledge of Wireless Technologies, Computer Networking, Data Networking, Signal Processing
- Wireless network system architecture and subsystem design
- Computer Architecture, Digital Logic, Processor/FPGA/SoC interfacing
- Expertise in hardware design (Circuit Design and Analysis, PCB, Devices, Signal and power integrity, interface with CAD/VDG/EPG)
- Ability to learn and use RF analysis and design tools
- Testing and debugging tools, Signal generator/analyzers, Logic Analyzers
- Knowledge of industry standards, standardization
- Comfortable with organization processes
- Good understanding of 3GPP wireless standards

### **Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup>, B.E/B.Tech in ECE from a recognized college/university).

### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification.

## **Job Description**

**Project Name:** 4G Radio Access Network

**Post code:** 43

**No. of Post(s):** 8

**Location:** Bengaluru

### **Roles and Responsibilities:**

LTE/NB-IoT/5G NR Layer 2, Layer 3, RRM, SON Development, Testing, Trials

### **Skills and Abilities:**

- Knowledge of Wireless Technologies, Computer Networking, Data Networking, Signal Processing
- Wireless network system architecture and subsystem design
- Testing and debugging tools
- Configuration Management, Scripting, Build and Development environment
- Able to work with Product integration and testing like functional testing, load testing, Stability testing, Regression testing etc
- Comfortable with organization processes
- C/C++ programming skills along with scripting.
- Unix Network Programming
- Data Structures and Algorithms
- Design Patterns
- Familiarity with Protocol Stack Development
- Good understanding of 3GPP wireless standards

### **Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> , B.E/B.Tech in ECE/CSE from a recognized college/university). Preference will be given to candidates from CSE background.

### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification.

### **Job Description**

**Project Name:** 4G Radio Access Network

**Post code:** 44

**No. of Post(s):** 6

**Location:** Bengaluru

**Roles and Responsibilities:**

LTE/NB-IoT/5G NR Layer 2, Layer 3, RRM, SON Development, Testing, Trials

**Skills and Abilities:**

- Knowledge of Wireless Technologies, Computer Networking, Data Networking, Signal Processing
- Knowledge of LTE / UMTS / WCDMA / HSDPA/ 5G or WLAN standards in the physical layer and future developments within 3GPP, OFDM, MIMO
- Wireless network system architecture and subsystem design
- Testing and debugging tools
- Experience with handling of specific test equipment (signal generator, signal analyser, logic analyser and pattern generator) is beneficial
- Expertise in FPGA Development – Tools for FPGA development, Timing analysis, Languages (VHDL/Verilog), Simulation, Modeling, Programming
- Matlab and Simulink and equivalent tools
- DSP Programming skillset preferred
- Comfortable with organization processes
- C/C++ programming skills along with scripting.
- Unix Network Programming
- Data Structures and Algorithms
- Good understanding of 3GPP wireless standards

**Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup>, B.E/B.Tech in ECE/CSE from a recognized college/university).

**Eligibility Criteria:**

- 0-3 years of professional work experience post qualification.

## **Job Description**

**Project Name:** 4G Radio Access Network

**Post code:** 45

**No. of Post(s):** 6

**Location:** Bengaluru

### **Roles and Responsibilities:**

- Hardware Development, Integration Testing
- BOM preparation and verification
- Card level documentation
- QA Validation
- Card testing and Card level reworks
- Development, Testing and Trials

### **Skills and Abilities:**

- Knowledge of Wireless Technologies, Computer Networking, Data Networking, Signal Processing
- Wireless network system architecture and subsystem design
- Computer Architecture, Digital Logic, Processor/FPGA/SoC interfacing
- Expertise in hardware design (Circuit Design and Analysis, PCB, Devices, Signal and power integrity, interface with CAD/VDG/EPG)
- Testing and debugging tools, Signal generator/analyzers, Logic Analyzers
- Knowledge of industry standards, standardization
- Comfortable with organization processes
- Good understanding of 3GPP wireless standards

### **Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup>, B.E/B.Tech in ECE from a recognized college/university).

### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification.

## **Job Description**

**Project Name:** 4g Field trial for Railways and Roll out for BSNL for South India

**Post code:** 46

**No. of Post(s):** 5

**Location:** Bengaluru /Hyderabad

### **Roles and Responsibilities:**

- Installation, commissioning and day to day activities to be performed at Railway 4G Proof of Concept Sites (Secunderabad) and BSNL/Railway sites PAN India.
- Conducting Field trial activities for Railway 4G up gradation, which includes 4G Core maintenance, up gradation and integration with enodeB and IP/MPLS backbone.
- CORE and 4G RAN System integration and testing in C-DOT lab and at various PAN India sites.
- Interfacing with various government and non-government customers for resolution of issues coming in their network

### **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 and loading/configuring the Servers.
- Knowledge of Architecture of EPC & IMS as well as different Call flows in 4G/Volte Network
- Having 4G RAN architecture knowledge will be preferred.
- 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 skills and able to analyse/present using Powerpoint/Excel.

### **Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup>, B.E/B.Tech in Computer Science & Engineering/IT/ECE or equivalent degree from a recognized college/university).

### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification, preferably in telecom industry.

## **Job Description**

**Project Name:** MAXNG Support

**Post code:** 47

**No. of Post(s):** 3

**Location:** Hyderabad/Pune/Bhopal

### **Roles and Responsibilities:**

- Handling routine maintenance issues at NGN CORE and related access sites.
- Upgrading and testing the new software release and patches as and when available.
- Conducting periodic audit on CORE elements and updating health status.
- Interfacing with various BSNL nodal agencies for resolution of issues coming in their network.
- Conducting periodic switchover from PR to GR CORE site.
- Checking all type of call scenarios and call detail record (CDR)

### **Skills and Abilities:**

- Must have good knowledge of Switching and IP domain telecom network
- Hands-on experience of working on UNIX/Linux environment, shell scripting will be an additional advantage
- Having experience of working on Cloud environment and loading/configuring the Servers in LINUX/UBUNTU environment.
- 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 skills and able to analyse/present using Powerpoint/Excel.

### **Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> ,B.E/B.Tech in Computer Science & Engineering/IT/ECE or equivalent degree from a recognized college/university).

### **Eligibility Criteria:**

- 0-3 years of professional work experience post qualification, preferably in telecom industry.

**Job Description**

**Project Name:** MIS Support

**Post code:** 48

**No. of Post(s):** 03

**Location:** New Delhi(02)/ Bengaluru(01)

**Roles and Responsibilities:**

- Providing Support for Management Information System (MIS) and ERP activities.
- Automation of internal processes.
- Development of new software packages for MIS and ERP
- Development of web portals and Mobile Applications.

**Skills and Abilities:**

- Hands on experienced in software design, development, testing and debugging of web applications.
- Working Knowledge of JAVA technologies - Net/Java, ASP/JSP/PHP, SQL, PL-SQL, HTML, Java Script,
- Working Knowledge of databases - Oracle / Sql Server / MySql
- Working experience in Operating systems - Windows/Linux.
- Working Knowledge of Mobile APP development.
- Working Knowledge of Oracle ERP

**Minimum Qualifications:**

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

**Eligibility Criteria:**

- 0-3 years of professional work experience post qualification.



## **Job Description**

**Project Name:** POC/ FIELD TRIAL SUPPORT-4G RAN

**Post Code:** 49

**No. of Post(s):** 04

**Location:** Railways (Secunderabad)

### **Roles and Responsibilities:**

- Support the Field trails/PoCs of the 4GRAN-eNodeB
- Deploy and Integrate the 4GRAN systems in the Field as needed
- Solve the EUTRAN technical issues in bringing up and operating in the Field
- Support and guidance to customers for operations and maintenance of 4G Network
- Network coverage test using Network analyzers, Drive test tools and other tools.
- To execute the test cases for the 4GRAN network in the field
- Support to 4GRAN deployment and field support all over India
- Travel to anywhere all over India for 4GRAN field support and field trails.

### **Skills and Abilities:**

- Hands-on working experience and expert knowledge of 4G/5G telecommunication systems is preferred
- Understanding principles of mobile communication network and main protocols. Knowledge about Protocols of 4G/5G will be added advantage
- Wide knowledge of testing approaches
- Knowledge of Linus OS, Linux Administration and Linux networking
- knowledge of RF measurement tools
- Excellent communicator, Team Player Attitude who can work independently also

### **Minimum Qualifications:**

- Min 65% in (10<sup>th</sup>, 12<sup>th</sup> ,BE/B.Tech in Electronics & Communication 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.