Job Description

Project Name: M2M Communication-Devops

Post Code: 61

No. of Post(s): 1

Location: New Delhi

Roles and Responsibilities:

- Devop Activities like Implementing various development , testing automation toolsinvolving C-DOT IoT platform CCSP .
- Having the technical skill to review , verify and validate the software codedeveloped in the project .

- Trouble shooting techniques and fixing the code bugs etc.

Skills and Abilities:

- Expert Knowledge of Database (any relational SQL DB),
- Good Knowledge of
    - Shell scripting, Automation scripts
    - Docker containers/Kubernetes
    - Jenkins, Junit, Selenium
    - Java
    - GIT
    - Microservices
    - Springboot
    - RESTful APIs

Minimum Qualifications:

- Min 65% in (10th, 12th, BE/BTech in CSE/ Information Technology/ Software Engineering/ Computer Science and Applied Mathematics/ Computer Science and Design/ Computer Science and Social Sciences/ Mathematics and Computing / Instrumentation from a recognized college/university.

Eligibility Criteria:

0-3 years of professional experience post qualification

<div align="center"><u>Job Description</u></div>

Project Name: M2M Communication

Post Code: 62

Name of the Post : Backend development Profile

No. of Post(s): 5

Location: New Delhi

Roles and Responsibilities

- ☐ Enhancements in IOT Platform
- ☐ REST API based development
- ☐ Perform functionality testing, integrated testing

Skills and Abilities:

- Should have expert Knowledge in
  - OOPs concepts, Data structures and Algorithms
  - Microservices ,maven
  - Junit
- Good Knowledge of
  - Java, J2EE
  - Application and web server
  - Eclipse, GIT
  - RESTful APIs
  - XSD, JSON/XML

- Hands on any SQL DB
- May have knowledge of
  - Docker containers/Kubernetes
  - PKI, TLS Security
  - DTLS

Minimum Qualifications:

- Min 65% in (10th, 12th, BE/BTech in CSE/ Information Technology/ Software Engineering/ Computer Science and Applied Mathematics/ Computer Science and Design/ Computer Science and Social Sciences/ Mathematics and Computing / Instrumentation from a recognized university.

Eligibility Criteria:

0-3 years of professional experience post qualification.

Job Description

Project Name: Face Recognition Back end applications

Post Code: 53

No. of Post(s): 09

Location: New Delhi

Roles and Responsibilities:

- Research & Development of appropriate ML algorithms to do face recognition
- Re-training of existing well-known models under face recognition
- Image pre-processing i.e. image enhancements
- Make predictive analysis and automation as per project requirements
- Identify appropriate data sets, data collection and data modeling.
- Statistical analysis of data sets to improve model pipeline
- 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, NLP, Knowledge of AI/ML computervision, Face Recognition algorithms
- Should have knowledge in access control using relays etc.
- Should have camera calibrations skills
- Familiarity with machine learning alogorithms and use of AI/ML frameworks suchas tensorFlow or Keras
- Skills in high scale similarity search
- Skills to generate high quality image embeddings considerting the variety of facesin India
- Skills to write GPU based code to speed up the processing
- Skills in working embedded systems and their corresponding peripherals likespeakers, Leds etc
- Working knowledge of MySQL and RDBMS
- Knowledge of fundamental mathematical concepts such as linear algebra and probability
- Knowledge of data structure & Algorithms, orbject-oriented design principles andbest practice patterns and code profiling
- Familiarity with Linux environment for software development
- Knowledge of developing ChatBot shall be an added advantage
- Excellent problem solving and debugging skills
- Proficient in software version maintenance tools such as Git etc.
- Excellent communicator, team player who can work independently also

Minimum Qualifications:

- Min 65% in (10th, 12th, BE/B.Tech in CSE/IT or equivalent degree from arecognized college/university)

Eligibility Criteria:

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

Job Description

Project Name: Face Recognition Front end applications

Post Code: 54

No. of Post(s): 03

Location: New Delhi

Roles and Responsibilities:

- Identify and analysis of software requirements
- Design & Development of software modules using Android, Python
- Design & Development of quality software to enhance software reusability &scalability
- Coding, code reviews, unit testing and release management integration ofSoftware modules & System Integration testing.

Skills and Abilities:

- Working knowledge in Flutter, Android Studio, Django, Flask, Python, Knowledgeof AI/ML computer vision algorithms, React Postgres, MySQL

Minimum Qualifications:

- Min 65% in (10th, 12th, BE/B.Tech in CSE/IT or equivalent degree from arecognized college/university)

Eligibility Criteria:

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

Job Description

Project Name: DIU/CIER/EIR

Post Code: 55

Name of Post : Database Engineer

No. of Post(s): 09

Location: New Delhi

Roles and Responsibilities:

- Experience/knowledge of RDBMS systems and its concepts.
- Experience/knowledge of RDBMS database technology- MySQL/ PostgreSQL.
- Experience/knowledge of RDBMS database administration.
- Experience/knowledge in writing optimized SQL queries.
- Experience/knowledge in backup and recovery of database system.
- Experience/knowledge of NoSQL database and its concepts.
- Experience/knowledge of MongoDB database administration in standalone,cluster mode.
- Experience/knowledge of MongoDB Sharing, Replication, Indexes
- Experience/knowledge of MongoDB Security, Transaction, Backup & recovery etc.
- Practical knowledge of database security and encryption
- Excellent communicator, team player who can work independently also.

Skills and Abilities:

- Experience/Knowledge of Linux basics, shell-scripting
- JAVA, SQL/No-SQL Databases.
- Experience/knowledge in writing applications using JAVA to load huge records in RDBMS/MongoDB database
- Knowledge of Linux basics, shell-scripting
  Tags : RDBMS, MySQL, PostgreSQL, NoSQL, MongoDB

Minimum Qualifications:

- Min 65% in (10th, 12th, BE/B.Tech in CSE/ITor equivalent degree from arecognized college/university)

Eligibility Criteria:

0-3 years of professional work experience post qualification

Project Name: DIU/CIER/EIR

Post Code: 56

Name of Post : GUI/Web Designer & Developer

No. of Post(s): 07

Location: New Delhi

Roles and Responsibilities:

- Identify and analysis of software requirements

- MVC based web application design and development.

- 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, Code optimization, unit testing and Release management

- Integration of Software modules & System Integration testing, Load and performance testing.

- Contribute to all phases of the development lifecycle and hands-on with distributed computing systems.

Skills and Abilities:

- Hands on experience with programming languages and Web Development Technologies (Java, JavaScript, PHP and Python, JQuery, Ajax, Javascript, HTML5 , CSS)

- WEB Services (SOAP, REST)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 softwaredesign & development

- Web security

- Experience with container based application development and troubleshooting, testing and maintenance of the existing software, including applications, databases, interfaces and new functionalities. Containerization and Container Orchestration tools (Docker & Kubernetes), Architecting Micro service applications.

- Knowledge of Databases (MySql, PostgreSQL, Cassandra, Redis, Mongo DB)

- Parallel Data Processing Engines (Apache Spark).

- Experience with Cloud Environments like AWS / Azure / GCP.

- Knowledge of Testing & debugging tool and version control system(GIT)

- Knowledge of web server configuration for Wildfly, Tomcat.

- Knowledge of IDE (Netbeans, Eclipse, IntelliJ, SpringTool Suite, VSCode)

- Excellent communicator, team player who can work independently also

Minimum Qualifications:

- Min 65% in (10th, 12th, BE/B.Tech in CSE/IT or equivalent degree from arecognized college/university)

Eligibility Criteria:

0-3 years of professional work experience post qualification

<div align="center">**Job Description**</div>

Project Name: DIU/CIER/EIR

Post Code: 57

Name of Post : Mobile application development

No. of Post(s): 04

Location: New Delhi

Roles and Responsibilities:

- Working knowledge in Android and iOS app development using React Native /Flutter Framework.
- Experience with Android SDK and working with remote data via REST andJSON.
- Knowledge of iOS, iPad, C++, Objective C, iPhone SDK, Xcode, Swift andCocoa Touch
- Work with Java-script, React Native / Flutter for App Development
- 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:

- Java-script, Mobile App, iOS, Android, React Native.
- React Native Framework , Flutter framework
- REST, JSON ,iOS, iPad, C++, Objective C, iPhone SDK, Xcode,
- Swift and Cocoa Touch Hosting App in Play store and App Store Knowledge of Databases (MySql, PostgreSQL, Cassandra, Redis, Mongo DB)

Minimum Qualifications:

- Min 65% in (10th, 12th, BE/B.Tech in CSE/IT or equivalent degree from arecognized college/university)

Eligibility Criteria:

0-3 years of professional work experience post qualification

Job Description

Project Name: DIU/CIER/EIR

Post Code: 58

Name of Post(s): Back-end Application development

No. of Posts : 06

Location: New Delhi

Roles and Responsibilities:

- Design & Development of optimised quality software to enhance performance, reusability & scalability.
- Code reviews and release management
- Load and performance testing techniques
- Tester s/w development and testing
- Development of IP packet/ message processing application, testing anddebugging.

Skills and Abilities:

- ☐ Proficiency in Programming Languages - C/C++, Python
- ☐ Good understanding of Linux and Shell Scripting
- ☐ Deep understanding of data structure and operating system
- ☐ Deep understanding of Protocols – TCP/IP, UDP, SNMP; inter-process communication (IPC) and Socket programming in multi-threaded environment.
- ☐ Experience/Knowledge of Protocols – SIP, SIGTRAN, Diameter, MAP and ISUPsignalling.
- ☐ Experience/Knowledge of design, development and integration of software modules
- ☐ Practical knowledge of system architectures, networking and embedded systems
- ☐ Knowledge of database – MySQL/ Redis/ Mongo
- ☐ Knowledge of compilation and debugging tools
- ☐ Practical knowledge of application security and encryption
- ☐ Experience with container based application development and troubleshooting, testing and maintenance of the existing software, including applications, databases, interfaces and new functionalities. Containerization and Container Orchestration tools (Docker & Kubernetes), Architecting Micro service applications.
- ☐ Excellent communicator, team player who can work independently also.

Minimum Qualifications:

- Min 65% in (10th, 12^{th,} BE/BTech in CSE/IT or equivalent degree from arecognized college/university)

Eligibility Criteria:
0-3 years of professional work experience post qualification

<div align="center">**Job Description**</div>

Project Name: DIU/CIER/EIR

Post Code: 59

Name of Post: Image Analysis AI/ML

No. of Posts : 04

Location: New Delhi

Roles and Responsibilities:

- Research & development of appropriate ML algorithms to analyze huge image data, feature extraction and automation as per project requirements.
- Image pre-processing & cleaning. Synthetic data generation.
- 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 other machine learning languages.
- Deep understanding of AI/ML algorithms.
- Knowledge of deep neural network algorithms.
- Knowledge of image searching algorithm on big data such as FAISS /elastic search preferred.
- Working knowledge of AI on different computation platforms like GPU/CPU.
- Knowledge of data structure & algorithms, object-oriented design principles and best practice patterns and code profiling.
- Familiarity with both environment Linux as well as windows for software development.
- Knowledge of distributive architecture and clusters preferred.
- Knowledge of SQL & NoSQL database like MongoDb, MySQL etc
- Knowledge of computer languages like C, C++, java.
- Excellent problem solving and debugging skills.
- Proficient in software version maintenance tools such as GIT, CVS.

- Practical knowledge of application security and encryption

  Excellent communicator, team player who can work independently also.

Minimum Qualifications:

- ☐ Min 65% in (10th, 12th, BE/BTech in CSE/IT or equivalent degree from a recognizedcollege/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 (10th, 12th ,B.E/BTech in Computer Science & Engineering/IT/ECE or equivalentdegree from a recognized college/university).

Eligibility Criteria:

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

<h1 style="text-align:center">**Job Description**</h1>

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 accesssites.
- 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 issuescoming 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 (10th, 12th ,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.

<h1 style="text-align:center">Job Description</h1>

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 (10th, 12th ,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 givenany cellular (2G/3G/4G) wireless deployment field experience

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 MPLSservice 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. Monitoringof Data Center Network & Security (Router, Firewall, Core& accessswitches for 400G Backbonecovering 80 Racks.
5. Big-Data Platform comprising of following clusters with hunders 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), WindowsOS
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. Knowlede of Big data Applications as Kaka, Spark, ELKstack, MongoDB, Hadoopetc.

Minimum Qualifications:

- Min 65% in (10th, 12^{th,} B.E/B.Tech in CSE/ECE or equivalent degree from arecognized 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 administraton
- 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 (10th, 12th , B.E/B.Tech in ECE /CSE/ 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 (10th, 12th ,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 qualifiedcandidates.

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 Jekins
- 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 (10th, 12th , 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) 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 (10th, 12th ,B.E/B.Tech in Computer Science/ECE from a recognized college/university).

Eligibility Criteria:

0-3 years of professional work experience post qualification