



Institute of Informatics and Communication  
University of Delhi South Campus  
Benito Juarez Road, New Delhi-110021

**Advertisement**

(MHRD-IIC/2018-19/01)

26th March 2019

Applications are invited for the following positions under MHRD sponsored Research Project at Institute of Informatics & Communication

**(Date of Start of Application: 26 March 2019, Last Date of Submission: 9 April 2019)**

S. No.	Post Advertised	Post Code	Essential Qualification	Essential Experience	No. of Positions	Monthly Remuneration (INR)
1	Project Manager	(CODE: 101)	"M.B.A with 10-12 Years experience in relevant area in large scale projects in education and community sector OR Ph.D. with 8-10 Years experience relevant work experience in large scale projects in education and community sector"	Preference will be given to candidates with projects relevant to Education and Community Sector	1	1,00,000-1,20,000
2	Software Architecture and Cloud Orchestration	(CODE: 102)	"M.Sc./MS/MCA degree in Computer Science / Information Technology / Informatics / Engineering or allied subjects with 60% or above with 3-5 Years of Experience Or B.Tech. with 60% or above with 5-7 Year of Experience"	Preference will be given to candidates with experience in software development and implementation projects in education sector	1	85,000 - 95,000
3	Service Integration & Delivery	(CODE: 103)	"M.Sc./MS/MCA degree in Computer Science / Information Technology / Informatics / Engineering or allied subjects with 60% or above with 3-5 Years of Experience Or B.Tech. with 60% or above with 5-7 Year of Experience"	Preference will be given to candidates with experience in software development and implementation projects in education sector	2	65,000 – 75,000
4	Database Administration and Curation	(CODE: 104)	"M.Sc./MS/MCA degree in Computer Science / Information Technology / Informatics / Engineering or allied subjects with 60% or above with 3-5 Years of Experience Or B.Tech. with 60% or above with 5-7 Year of Experience"	Preference will be given to candidates with experience in software development and implementation projects in education sector	1	65,000 – 75,000
5	DevOps	(CODE: 105)	"M.Sc./MS/MCA degree in Computer Science / Information Technology / Informatics / Engineering or allied subjects with 60% or above with 3-5 Years of Experience Or B.Tech. with 60% or above with 5-7 Year of Experience"	Preference will be given to candidates with experience in software development and implementation projects in education sector. Experience in a similar position and industry certifications may be preferred.	1	55,000 -62,450

Interested candidates may submit their applications online at <http://research.iic.ac.in/project> along with required supporting documents on or before the last date. **The last date for filling up the application form is 9<sup>th</sup> April 2019.**

The work descriptions (required skill set) for each of the above posts are mentioned in Annexure - I. The Terms and conditions are mentioned in Annexure – II.

**Principal Investigator**  
MHRD Project

## Annexure-I

Detailed Job Descriptions of the posts as advertised vide Advertisement Number **MHRD-IIC/2018-19/01**

### **Project Manager**

#### Work Description

Project manager will coordinate people and processes to ensure that projects are delivered on time and produce the desired results. Project Manager will be the go-to person for everything involving a project's organization and timeline.

It includes developing detailed project plans, ensuring resource availability and allocation and delivering every project on time within budget and scope.

#### Responsibilities:

- Coordinate internal resources and third parties/vendors for the flawless execution of projects
- Ensure that all projects are delivered on-time, within scope and within budget
- Assist in the definition of project scope and objectives, involving all relevant stakeholders and ensuring technical feasibility
- Ensure resource availability and allocation
- Develop a detailed project plan to monitor and track progress
- Manage changes to the project scope, project schedule and project costs using appropriate verification techniques
- Measure project performance using appropriate tools and techniques
- Report and escalate to management as needed
- Manage the relationship with the client and all stakeholders
- Perform risk management to minimize project risks
- Establish and maintain relationships with third parties/vendors
- Create and maintain comprehensive project documentation
- Meet with clients to take detailed ordering briefs and clarify specific requirements of each project
- Delegate project tasks based on junior staff members' individual strengths, skill sets and experience levels
- Track project performance, specifically to analyze the successful completion of short and long-term goals
- Meet budgetary objectives and make adjustments to project constraints based on financial analysis
- Develop comprehensive project plans to be shared with clients as well as other staff members
- Use and continually develop leadership skills
- Attend conferences and training as required to maintain proficiency
- Perform other related duties as assigned by Project Investigator.
- Develop spreadsheets, diagrams and process maps to document needs

#### Required Qualifications / Skills

- Proven working experience in project management
- Excellent client-facing and internal communication skills
- Excellent written and verbal communication skills
- Solid organizational skills including attention to detail and multitasking skills
- Strong working knowledge of Microsoft Office
- Project Management Professional (PMP) certification is a plus
- Must have experience in Education Sector

### **Software Architecture and Cloud Orchestration**

#### Work description

The position requires experience in architecting and implementing software and data center automation, orchestration and cloud management projects and having the stakeholder communication skills to establish credibility with different stakeholders of Project. The ideal candidate will take a team approach to implementing winning solution for project.

#### Responsibilities

- Understand business goals and translate them into cloud automation and orchestration solutions
- Evangelize Project's vision for a multi-cloud world and offer hands on experience delivering these outcomes for our stakeholders
- Design services that leverage cloud native architectures, microservices like Docker and Kubernetes, as well as IaaS and PaaS architectures

- Develop detailed blueprint specifications that developers will use to write code and develop the automation components. Integration with 3rd party software products like (Active Directory, Service Now, etc) via RESTAPI is integral to this work.
- Work collaboratively in a scrum agile team leveraging a variety of DevOps tools (e.g. Jira, GitHub, Jenkins, etc) as part of the CD/CI pipeline
- Work with software development teams at a hands-on level to design and write code
- Develop and test end-to-end blueprint incorporating all developer code to deliver the desired outcome
- Create toolkits and best practice documents and whitepapers
- Respond to requests for proposal and proposal/SOW preparation, including development of project implementation plans, cost estimates and resource plans
- Oversee projects from a technical perspective to ensure high quality delivery and stakeholder satisfaction
- Develop internal lab/demo environment architecture, implement and manage the ongoing lab operation
- Develop trusted relationships with project team members, stakeholders and prospects
- Analyze stakeholders business and functional requirements and develop cost effective, creative technical solutions to fulfill requirements
- Stage reference architectures, prototypes and demos in lab environments
- Wear multiple hats as needed in a dynamic, fast moving startup environment
- Participate in evaluation of new automation tools

#### Required Qualifications / Skills

- Excellent architecture expertise with in-depth understanding of cloud architecture patterns
- Ability to whiteboard solutions interactively with stakeholders and develop robust architectural documentation
- High comfort level using one or more automation tools or orchestration application stacks and frameworks (e.g. Terraforms, Lambda, Azure Pack, Azure Stack, OpenStack, CloudStack, VMware vCO, or Microsoft Systems Center Orchestrator)
- Experience with developing and managing cloud-computing environments like Amazon EC2, Azure and/or GCP
- Experience developing scalable cloud microservices using container technologies like Docker, Kubernetes, and Mesosphere
- Ability to develop and debug software scripting and code in at least one of the following languages (Powershell, Bash, Python, Perl, Ruby, Java, Javascript, etc.)
- Understanding of architecture and use cases for configuration management tools like Puppet, Chef, Ansible, and SALT Stack
- Leverage DevOps tools like GitHub, Jira, Jenkins, Artifactory, Zephyr, etc. to deliver automation and promote a DevOps culture
- Experience with building and running large scale, distributed, highly-available, fault-tolerant, multi-tier applications running on both Windows and Linux.
- Ability to manage multiple projects while maintaining a high level of detail
- Understanding of virtualization technologies (VMware, KVM, Hyper-V)
- Experience in network virtualization technologies (e.g. NSX or ACI)

## Service Integration & Delivery

#### Responsibilities

- Provide general engineering expertise and be the technical leader responsible for coordinating and overseeing all system interfaces and system integration;
- Be responsible for all systems engineering activities for the team;
- Coordinate system integration working group regular meetings and actions;
- Define and update plan of subsystem software versions included in each baseline;
- Define and update the plan for rolling-out the various functions;
- Ensure preparation of all documentation to achieve intermediate and final approvals.
- Collaborate with support team, Solution Architects, Account Executives and internal Managed Services staff, in support of deliverables.
- Review and audit service levels, performance and communicate any failures.
- Lead and manage Service Delivery Review Program on behalf of user/client.
- Participate in Change Review process for clients ensuring client satisfaction and contractual integrity are maintained.
- Oversee execution and delivery of Event Analysis Reporting.
- Enable service delivery by owning Service-Now documentation.
- Manage client expectations.
- Coordinate major client work efforts with appropriate staff.
- Lead effort for new client integrations and existing clients' new service and/or device integration or de-integration.
- Enable support team through client specific training.

#### Required Qualifications / Skills

- Experience leading or managing a development team, preferably in an Agile environment
- Team player with excellent written and spoken English communication skills
- Previous experience with Software development and database design fundamentals
- Understanding of ITIL best practices and IT Service Management principles
- Distributed version control expertise with Git
- Knowledge of software design patterns.
- Understanding of current, and widely accepted, software development standards and practices.
- Experience with, or understanding of, Agile/Lean Software Development practices such as Scrum.

- Ability to work independently
- Decision making skills in high pressure situations

## Database Administration and Curation

### Work Description

Provides database applications by developing architecture, programming, troubleshooting, and security.

### Responsibilities

- Provides primary managerial direction and performs personnel administrative functions of direct report staff (e.g. training, supervising, mentoring and coaching, work assignments, timesheets, performance evaluations, etc.) for the purpose of maintaining necessary staffing, enhancing productivity of staff and ensuring necessary department outcomes are achieved.
- Provide leadership to the DBA team in managing scope, issue resolution, project priorities, support & operations to the business
- Facilitate agile teams' delivery with high degree of focus on quality & timeliness
- Coordinate the installation, upgrading and patching of Relational Database Management System (RDBMS) systems. Oversee database monitoring, tuning and optimization
- Capacity planning for all database environments. Control user database access and data security
- Work with application and system architects and subject matter experts to evaluate the logical data models and design the corresponding physical database structure while and ensure standard control procedures are followed.
- Direct the physical schema design, including primary indexes and referential integrity constraints.
- Manage overall delivery & support process across multiple initiatives to ensure sustainable DBA practice which includes automation, process documentation, production support, optimization & monitoring
- Provide leadership in developing database standards and procedures. Establish benchmark criteria for evaluating alternate database products. Function as technical liaison for database-related project activities; provide on-call support
- Assist in the implementation/upgrades/enhancements, testing, and installation of technology solutions.
- Assist development teams in troubleshooting and stabilizing production issues
- Ensures all recommended and implemented solutions are consistent with IT guidelines, procedures, Strategic Plan, goals, and objectives.
- Ensure consistent database back-up/recovery; perform fault analysis and resolution; monitor and manage database backups, logs, and maintenance
- Maintain data integrity and environmental security to improve information privacy, data protection, and compliance with regulations, audits, and business requirements
- Develop and implement backup/recovery and purge/archive strategies

### Required Qualifications / Skills

- Ability to plan, design & implement strategies for databases technologies
- Knowledge of and experience with both SQL and NoSQL.
- Experience in managing cloud database environments
- Excellent communication skills both oral and written; organizational skills and analytical skills
- Ability to work in a fast-paced and demanding environment; multitask and prioritize
- Ability to operate in a high transaction environment supporting 24/7 processing
- Ability to organize, prioritize, and coordinate multiple work activities and meet critical deadlines
- Strong technical and leadership skills and ability to lead others in the development and adherence of best practices
- Ability to interact with many projects and project reviews and gauge the level of interaction required
- Excellent problem-solving skills with strong analytical ability and creative troubleshooting

## DevOps

### Work Description

DevOps Engineers look at individual functions of the cloud environment and write code to scale them to fill some immediate need. This might include adding users to a cloud infrastructure, adding permissions, adding or changing workflow processes, or adding entire objects that function like a container to meet business needs. Their focus is centered on configuration, documentation, optimization and support of the infrastructure components.

DevOps Engineers are responsible for supporting the users of the infrastructure they develop, and the first line of defense is protecting the cloud against hackers and viruses. They do this with code, of course, building secure software from the start.

### Responsibilities

- Build upon the work of their counterparts on development and IT teams to scale cloud programs, create workflow processes, assign tenants and more
- Manage software project lifecycle
- Implement integrations required under the project
- Deploy updates and fixes
- Build tools to reduce occurrences of errors and improve stakeholder experience
- Mentor software developers and architecture teams within an organization to teach them how to create software that is easily scalable

#### Required Qualification and Skills

- Agile Project Management
- Cloud Technology
- Container Concepts
- Continuous Integration
- Deployment Automation & Orchestration
- Infrastructure Automation
- Open Source OS
- Orchestration
- Source Control
- Should be comfortable in using one or more automation tools or orchestration application stacks and frameworks (e.g. Terraforms, Lambda, Azure Pack, Azure Stack, OpenStack, CloudStack, VMware vCO, or Microsoft Systems Center Orchestrator)
- Experience developing scalable cloud microservices using container technologies like Docker, Kubernetes, and Mesosphere
- Ability to develop and debug software scripting and code in at least one of the following languages (Powershell, Bash, Python, Perl, Ruby, Java, Javascript, etc.)
- Understanding of architecture and use cases for configuration management tools like Puppet, Chef, Ansible, and SALT Stack
- Leverage DevOps tools like Git, Jira, Jenkins, Artifactory, Zephyr, etc. to deliver automation and promote a DevOps culture
- Experience with building and running large scale, distributed, highly-available, fault-tolerant, multi-tier applications running on both Windows and Linux

## Annexure-II

### Terms and Condition

1. Applicants are required to apply online from **26-03-2019** to **09-04-2019** through the website <http://research.iic.ac.in/project>. No other mode of application will be accepted in any case. In case the candidate is applying for multiple positions, separate application form for each position has to be filled. However, candidates applying for multiple positions are required to mention the same e-mail id and contact number in all applications.
2. The interested applicants are advised to go through the eligibility criteria carefully and ascertain themselves regarding their eligibility. The same is available at <http://research.iic.ac.in/project>.
3. Those candidates, whose application is successfully submitted, will be called for Interview or/and Skill & Aptitude Test. Only those candidates, who are shortlisted after the Interview and clear the Document Verification, will be selected.
4. Date of Interview or/and Aptitude Test and Document verification will be informed after last date of submission of form. Document verification will be held on the date of Skill & Aptitude Tests and/or Interview. The same will be published at <http://research.iic.ac.in/project>. Candidates are advised to check the website regularly.
5. The shortlisted candidates will be deployed on contract basis, initially for the period of twelve months (which may be further extended based on requirements/performance of the candidate). The Project Appointment Committee (PAC) reserves the right to terminate appointment at any time during the project without assigning any reason thereof.
6. Final selection of candidates for hiring will be based on the performance of the candidates in the Interview and as found eligible as per prescribed criteria. PAC reserves right to conduct written test or skill test for screening the candidate at any time during the process of selection, if felt necessary.
7. No TA/DA will be provided to candidates for appearing for the Interview/ Skill & Aptitude Test/ Document Verification.
8. The place of deployment will be Delhi/nearby places. Candidates must be willing to travel to any place outside Delhi as part of their job. They can be temporarily posted outside Delhi, if required.
9. The qualification of the candidates must be from recognized University/Institution.
10. Selected candidates will not be paid any other financial benefits like Medical, HRA and Transport etc. except consolidated salary.
11. Candidates with last semester result awaited or incomplete degrees are eligible to apply.
12. Candidates must bring at least one original Photo ID proof and all original Mark sheets/ degrees/ testimonials/ post qualification experience certificates (including the Experience letter of the current place of working)/ one passport size photo and their SELF ATTESTED photocopies on the day of the Document Verification for verification purpose otherwise they will not be allowed to appear in the interview/ Aptitude Test. The cut-off date for calculating age, qualifications, experience etc. will be the last date of submission of the form i.e. **26.03.2019**. In case, last date is extended, the date of determining eligibility will not change.
13. The name of the candidate in the application form must be the same as mentioned in the certificate of class X. In case the candidate has changed his name subsequent to Class X, the evidence to that effect should be furnished at the time of interview.
14. Canvassing/trying to influence IIC/DU employees to secure the job in any manner shall disqualify the candidate.
15. PAC has the right to accept or reject the application without assigning any reason thereof
16. The applicants are advised to visit the website <http://research.iic.ac.in/project> regularly for schedule of Document verification/ Skill & Aptitude Test/Interview or any update. No separate communication shall be made in any other form.
17. Applying does not provide any right to candidate to claim for job.

### Important Information

<b>Date of Start of Application</b>	<b>26<sup>th</sup> March 2019</b>
<b>Date of Closing of Application</b>	<b>09<sup>th</sup> April 2019</b>

### Contact Information

<b>Email</b>	<b>projects@iic.ac.in</b>
<b>Phone</b>	<b>011-24157350 011-24110237</b>