

**INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE  
(ACADEMIC AFFAIRS OFFICE)**

Dated: December 14, 2022

**ADVERTISEMENT TO FILL UP PROJECT POSITIONS\***

Applications are invited from Indian nationals only for project position(s) as per the details given below for the consultancy/research project(s) under the Principal investigator (Name: **Prof. Apurbba Kumar Sharma**), Dept./Centre **Dean of Academic Affairs**, Indian Institute of Technology, Roorkee.

1. Title of project : (i) **Academic Affairs Office Automation (AAA)**  
(ii) **Data Management System (DMS)**
2. Sponsor of the project : Internal Resources

Project position(s) and number	Qualifications	Emoluments	Duration	Job description & Desirable Qualification
<b>Project Associate (as Junior Programmer) – 03 No. (AAA)</b>	B.Tech./MCA/M.Sc. <b>(Desirability- 1-3 years' work experience in relevant field)</b>	Rs.25,000/- to 60,000/- + HRA	One year and may be extended further	<b>Appendix-A</b>
<b>Project Assistant (as Data Entry Operator) -02 No. (AAA)</b>	B. Tech./ B.Arch./ M.Sc./ MA (with 05 years work experience in office automation system)	Rs. 25,000/- to 60,000/- + HRA	One year and may be extended further	Digitization and automated academic activities (UG, PG & PhD) on software / applications based on visual studio, net, C#, SQL, etc.
<b>Project Consultant (as Data Scientist) - 02 No. (AAA &amp; DMS)</b>	Ph.D + 4 year experience Or M.Tech./ M.Arch. + 6 years experience or B.Tech./B.Arch. + 10 years experience	Rs. 75,000/- to Rs. 2,50,000/- + HRA	One year and may be extended further	<b>Appendix-B (DMS) &amp; Appendix-C (AAA)</b>

3. Candidates before appearing for the interview shall ensure that they are eligible for the position they intend to apply.
4. Candidates desiring to appear for the Interview should submit their applications with the following documents to the office of Principal Investigator through email, by post:
- Application in a plain paper with detailed CV including chronological discipline of degree/certificates obtained.
  - Experience including research, industrial field and others.
  - Attested copies of degree/certificate and experience certificate.
5. Candidate shall bring along with them the original degree(s)/certificate(s) and experience certificate(s) at the time of interview for verification.
6. Preference will be given to SC/ST candidates on equal qualifications and experience.
7. Please note that no TA/DA is admissible for attending the interview.
8. The last date for application to be submitted to office of Principal Investigator is ..... by 5:00 PM.

DECEMBER 30, 2022

JANUARY 10, 2023

The interview will be held **offline** at the Office of Dean of Academic Affairs on ..... at 11:00 a.m.

Tel.: 01332-285255

Email: daa\_office@iitr.ac.in

Name and signature of Principal Investigator

*Apurbba Kumar Sharma*  
डीन (सिक)/(Dean SRIC)  
भा. प्रौ. सं. रुड़की/IIT Roorkee

*Apurbba Kumar Sharma*  
13/12/2022

*16/12/2022*

*15/12/22*

*16/12/2022*

## **Project Associate (as Junior Programmer) – 03 No. (AAA)**

### **Appendix A**

#### **Job Description**

- Programming and customizing applications in JavaScript, jQuery, PHP/DotNet/Python, Ajax and CMS Expert
- Developing database applications using MySQL, Designing responsive pages in HTML5, CSS3, web applications
- Maintaining encryption and security of online platforms and Network Administration.
- Web designing, layout and coding of a website

#### **Desirable Qualification**

- Essential: Java EE platforms, J2EE framework software such as Spring, Struts, jQuery, Ajax, JSON, CSS, HTML ('node.js' for programming and angular for frontend designing and development). SaaS. ASP.Net. Silverlight, SQL, CMS systems, Python, Django, Flask or other Python frameworks.
- Desirable (additionally): DB schemes and SQL development with ORM frameworks, Networking, Operating systems, PHP, Git, (Good Knowledge of Sizmek and Double click, MVC templates.
- Experience: Agile/Scrum development process

# Project Consultant (as Data Scientist) – 01 No. (DMS)

## Appendix-B

### Job Description

- Web development in asp. Net using C#/Ajax/java script.
- Web designing, layout and CSS for website development.
- Working knowledge of CMS
- Management of SQL Server database.
- Development of database applications using MySQL,
- Designing responsive pages in HTML5, CSS3, Java Script, jQuery, web applications.
- Management of Web Server and Database Server backups.
- Maintaining encryption and security of online platforms and network Administration.

### Desirable Qualification

Developed and managing Ph.D. part of Academic Information System (acad.iitr.ac.in.)(PL-ASP.NET Using C# / SQL Server)

- Online Synopsys and Thesis Upload System.
- Online display of the Thesis Report Status to the concerned faculties.
- Online Library portal for Thesis download
- Automated Email System through S.W.

Developed and managing following S/W (PL-ASP.NET Using C# / SQL Server)

- Online Student NOC System.
- Online system for Syllabi Creation/Revision.
- Online System to apply for NPTEL Course
- Online Query Portal for faculty.
- Online Query/Request Portal for student.

Backup of Web Server involves:

- Taking full backup of code (Academic Information website) on server as well as external hard disk.
- Taking Backup after every new update and publishing of website.

Backup of Database server involves:

- Taking full backup of data on server as well as external hard disk.
- Taking backup at fixed interval of time.

Data Management and Data retrieval

- Data fetching from database server by using SQL queries as per day to day requirement.
- Updating data on database server by using SQL queries as per requirement.
- Searching/Removal of duplicate records present in database.
- Maintaining data consistency and integrity.
- Creation/Deletion of new tables in database as per requirement.
- Creation/Deletion/Modification of views in database as per requirement.

## **Project Consultant (as Data Scientist) – 01 No. (AAA)**

### **Appendix-C**

#### **Job Description**

- Responsible for data collation, analysis, presentation and reporting.
- Responsible for all academic data management & extraction of information there from relevant to academics.
- Responsible for preparation of academic related data for RAC, parliamentary as well as ministry queries, RTI/ Commission queries, etc.
- Analyze raw data: assessing quality, cleansing structuring for downstream processing
- Design accurate and scalable prediction algorithms
- Collaborate with technical team to bring analytical prototypes to production
- Generate actionable insights for Academic Quality Improvements

#### **Desirable Qualification**

- Deep understanding of predictive modeling, machine learning, clustering and classification techniques, and algorithms
- Fluency in a programming language (for example Python, C, C++, Javascript, SQL, ASP.Net, Python)
- Familiarity with Big Data frameworks, AI and Mainframe tools and visualization tools (for example-Cassandra, Hadoop, Spark, Tableau)