



**NATIONAL INSTITUTE OF TECHNOLOGY, ROURKELA – 769 008(ODISHA)  
SPONSORED RESEARCH, INDUSTRIAL CONSULTANCY & CONTINUING  
EDUCATION**

Advertisement No: NITR/SR/17/EC-024/229

Dated: 01.08.2017

**Advertisement for Senior Research Fellow (SRF), Junior Research Fellow (JRF) and  
Project Assistants**

**Applications are invited on prescribed format for the following assignment in a purely time bound research project undertaken in the Department of Electronics and Communication Engineering of the Institute.**

1.	Name of the Temporary Post	Senior Research Fellow (SRF): 6 post, Junior Research Fellow (JRF): 2 post, Project Assistant: 4
2.	Name of the Research Project	<b>Intelligent Surveillance Data Retriever (ISDR) for Smart city Applications</b>
3.	Name of the Sponsoring Agency	IMPRINT-India Project, Govt. of India
4.	Tenure of the Project	03 years
5.	Tenure of the Assignment	03 years
6.	Job Duration and Description	The job duration will be for three years or up to the termination of project, subject to annual performance review. Primarily the project staff SRF/JRF will be involved with simulation, product development and experimental work. The candidate is entitled to register for Ph.D. at NIT, Rourkela, if found suitable. The project assistants will be supporting this project.
7.	Consolidated monthly Fellowship (JRF), excluding DA (20%) i) 1 <sup>st</sup> Year ii) 2 <sup>nd</sup> Year iii) 3 <sup>rd</sup> Year Consolidated monthly Fellowship (SRF), excluding DA (20%) i) 1 <sup>st</sup> Year ii) 2 <sup>nd</sup> Year iii) 3 <sup>rd</sup> Year Consolidated monthly salary	Rs. 25,000.00 Rs. 25,000.00 Rs. 28,000.00 Rs. 32,000.00 Rs. 32,000.00 Rs. 35,000.00 Rs. 15, 000.00

	Project Assistants, excluding DA (20%)	
	Age Limit	Preferable: <ul style="list-style-type: none"> <li>• Senior Research Fellow (SRF) – 30 years</li> <li>• Junior Research Fellow (JRF) – 28 years</li> </ul> Note: For experience candidate no age limit
8.	Essential Qualifications and Experience (SRF and JRF)	BTECH/BE/M.E./ M. Tech /MSc/MCA/MBA degree in Electronics and Communication Engineering/ Electronics Engineering/ Electronics and Electrical Engineering/ Electrical Engineering/ Electronics and Tele-communication Engineering/Computer Science/ Include Electronics & Instrumentation/Instrumentation/VLSI/ Computer Science and Engineering/Information Technology with specialization in Embedded system/Communication Networking/Signal processing/Image processing/Video Processing/VLSI Communication or similar fields with above 60% (or 6 CGPA) of marks. GATE score will have advantage.
10	Desirable Experiences for SRF and JRF	Hardwar: <ul style="list-style-type: none"> <li>• C, C++ (in-depth, sensor data integration): 1 position</li> <li>• Python, Embedded OS (RTOS) (optional): 1 position</li> <li>• Experience on hardware related project, IDE (Atmel studio, PLC, ARM (<math>\mu</math>Vision), Electronics background will be preferable</li> <li>• Electronics circuit Design and testing</li> <li>• Experience PCB Design</li> </ul> Software: Backend (Server): 1 position <ul style="list-style-type: none"> <li>• Web socket, Node Js, Java script, SQL (Mandatory), MogoDB, NoSQL</li> <li>• Experience on web based database design project and API development</li> </ul> Fond End: <ul style="list-style-type: none"> <li>• Website (HTML, CSS, Java script, JQuery), Node Js (optional)</li> </ul>

		<p>Data Analytic:</p> <ul style="list-style-type: none"> <li>• OpenCV, Python lib, MATLAB, Machine learning algorithm, R</li> <li>• Project Management</li> <li>• R, Python, soft and problem solving skills</li> </ul> <p>Domain experience:</p> <p>Experience on Embedded system development / Video Processing / Signal Processing / Pattern Recognition / Software development / Embedded Linux driver programming / Data Analytic (Image &amp; Video data analytic will be more preferable)</p>
11.	Experience and Qualification for Project Assistant	<ul style="list-style-type: none"> <li>• Hardware &amp; Software development (BTECH/BE/MTECH/MSc Degree in Electronics/Electrical/Computer science/MCA)</li> <li>• Hardware Development (ITI/Diploma/BTECH/BE in Electronics/Electrical/Computer science)</li> <li>• Lab management (+2 / ITI / Diploma / Any graduates)</li> </ul>
	Selection Procedure	Written/Practical test following to technical and personal interview
	Accommodation	Bachelor accommodation in the Institute may be provided subject to availability. Room rent will be charged as per institute norms.
12.	<p>For technical information on the project, the candidate may contact the Principal Investigator at the following address:</p> <p>Name : Dr. Santos Kumar Das</p> <p>Address : Department of Electronics &amp; Communication Engineering (EC), NIT., Rourkela-769 008</p> <p>Telephone No : +91-661-2462466(O), +91-9437940105 (M)</p> <p>E-mail : <a href="mailto:dassk@nitkl.ac.in">dassk@nitkl.ac.in</a>, <a href="mailto:das.santoskumar@gmail.com">das.santoskumar@gmail.com</a></p>	

Eligible persons may apply in the prescribed format (available in the Institute Website) affixed with coloured photographs to be submitted in duplicate along with photo copies of relevant certificates, grade/mark sheets, publications etc., to Asst. Registrar, SRICCE, National Institute of Technology, Rourkela-769 008 on or **before 21<sup>st</sup> August, 2017**. The cover should be super-scribed clearly the post applied for & Name of the Project. **Eligible candidates may also send their resume via email, mentioned above, in advance.**

Mere possession of minimum qualification does not guarantee invitation to the interview. Candidates will be short listed and intimated based on merit and need of the project.

The tentative Date and Time for Interview will be on **9<sup>th</sup> and 10<sup>th</sup> of September 2017** at 10:00 AM. The place of Interview will be at **Department of Electronics and Communication Engg., NIT Rourkela**

**Asst. Registrar (SRICCE)**

Copy to:

- 1) All Heads of the Departments, NIT Rourkela for publication on Departmental Notice Boards.
- 2) Prof. Santos Kumar Das, Principal Investigator with a request to give wide publicity to advertisement.
- 3) Institute website
- 4) Head of the Department, EC
- 5) Project file.

## About IMPRINT India

IMPRINT is the first of its kind MHRD supported Pan -IIT + IISc joint initiative to address the major science and engineering challenges that India must address and champion to enable, empower and embolden the nation for inclusive growth and self-reliance. It stands for Impacting Research Innovation and Technology. IMPRINT provides the overarching vision that guides research into areas that are predominantly socially relevant. Please refer to the website <http://www.imprint-india.org> for more information.



IMPACTING RESEARCH INNOVATION  
AND TECHNOLOGY



Ministry of Human Resource Development  
Government of India



Government of India

Ministry of Housing and Urban Affairs



## PROJECT DETAILS

**PROJECT TITLE:** - INTELLIGENT SURVEILLANCE DATA RETRIEVER (ISDR) FOR SMART CITY APPLICATIONS

**Project No:** 7794

**Budget:** - Rs. 3.86 Crores

**Time Period:** 2017-2020

**Principal Investigator:** - Dr. Santos Kumar Das, Dept. of Electronics & Communication Engineering, NIT Rourkela

**Co –Investigators**

**Dr. N V L Narasimha Murty**

Assistant Professor, Electrical Sciences Department, IIT Bhubaneswar

**Umesh Chandra Pati**

Associate Professor, National Institute of Technology Rourkela, Odisha.

Dr. Poonam Singh

Associate Professor, Department Electronics & Communication Engg, NIT Rourkela

**Dr. Korra Sathya Babu**

Assistant Professor, Department of Computer Science and Engineering, NIT Rourkela

**Dr. Santanu Sarkar**

Assistant Professor, Department Electronics & Communication Engg, NIT Rourkela

**Dr. Sougata Kumar Kar**

Assistant Professor, Department Electronics & Communication Engg, NIT Rourkela