

The logo for the Indian Institute for Human Settlements (iihs) is located in the top left corner. It consists of the lowercase letters "iihs" in a white, sans-serif font, with a registered trademark symbol (®) to its upper right. The text is set against a dark red rectangular background.

INDIAN INSTITUTE FOR
HUMAN SETTLEMENTS

JOB DESCRIPTION

Engineer – IoT Lab

About Us

The Indian Institute for Human Settlements (IIHS) is a national education institution committed to the equitable, sustainable and efficient transformation of Indian settlements.

IIHS aims to establish an independently funded and managed national university of eminence for research and innovation focused on the challenges and opportunities of India's urban transition. The proposed IIHS University will be an institution of eminence that will host an integrated programme of quality campus-based education and research, training and lifelong learning for working professionals, distance and blended learning, as well as a whole array of practice and advisory services. The university will have a strong interdisciplinary orientation bringing together theory and praxis that is grounded in the South Asian context and also engages with and draws from knowledge across the globe.

For more information, please see <http://www.iihs.co.in>

Job Description

IIHS is looking to hire an IoT Engineer as an Associate in the IoT Lab to help and support the IoT technology programme. Using the lab as an incubation space, the goal will be to establish the IoT platforms and technology in a manner that will enable scaling up and deployment at the upcoming Kengeri campus. The incumbent will work as a key and integral part of the team that develops cutting edge IoT and ICT technology.

The qualified candidate will directly contribute to the advancement of environmental, spatial and sensing technologies. S/he will be a part of the technology stream, involved in cutting edge work that will put IIHS on the global map.

Activities and Tasks

Responsibilities would include, but not be limited to, the following:

- Analysing different kind of sensors, microcontrollers, single board computers, power supplies, enclosures and other electronic components based on usage, range, accuracy and cost;
- Coding microcontrollers on any open source IDE;
- Analysing different communication protocols and networks;
- Testing and deploying sensors such as Temperature, Humidity, CO2, Air Quality, Occupancy and others with 12C, RS485, RS232, LoRa, IPV6 etc. protocols;
- Establishing communication platforms such as sub system for interconnect communication; for outdoor locations, implementing wireless communication for data collection;
- Setting up data collection, storage, analysis and processing;
- Edge computing for controls and management of devices and systems;
- Interfacing BMS for direct collection of data Photovoltaic System, Diesel Generator, Weather Station etc.;
- Standardising all applications based on performance, operating conditions and ruggedness for usage;
- Establishing power supply solutions for indoor and outdoor usage;
- Collaborating with the Urban Informatics Lab at IIHS to ensure database structure for use cases with the ability to scale and port to campus data lake;

- Coordinating with cross functional teams including the Urban Informatics Lab (UIL), Geospatial Lab (GSL), Campus Development Team and external partners for Campus OS;
- Providing support to other IIHS activities including academics, research, training, practice, operations and others;
- Participating in all activities of Institution-Building at IIHS, carrying out tasks as assigned by IIHS, and travelling on IIHS work within or outside the country as needed.

Structure and Reporting

The IoT Engineer (Associate - IoT Lab) will report to the IoT Lab Manager or any other person designated by the CTO at IIHS, and will be required to collaborate effectively with a diverse group of internal teams and external individuals/organisations, and students.

Person Specification

Skills required would include, but not be limited to:

- Machine Learning and Artificial Intelligence (AI);
- Design for Data;
- IP Networking;
- Hardware Interfacing;
- Information Security;
- Business Intelligence.

Applicants should have

- A Bachelor's degree in engineering, computer science, information systems or related fields;
- 2-5 years of experience in a related field or organisation;
- The ability to understand business requirements and translate them into practical designs and engineered platforms;
- Hands-on experience in development of hardware and embedded software, instrumentation, environmental controls, testing on IoT platforms in IoT environments;
- Experience with lab setups or working with lab engineers to create needed setups;
- Skills with analytical software - both using and manipulating data with statistics abilities;
- Experience with networking technologies (e.g., TCP/IP layer 2/3, UDP, NAT, QoS, IPV4, IPV6, VLANs, routing protocols, etc.);
- Experience with protocol analysis, network analyzers, packet capture devices;
- Familiarity with multi-threaded or real time systems;
- Must be an independent self-starter, hands-on and willing to work independently on new technologies and systems;
- Strong interpersonal skills are essential for this position, along with demonstrated competency in developing effective solutions to diverse and complex business problems.

This offer is on an exclusive basis, which implies that other professional assignments (whether compensated or not) that bear a potential conflict of interest with IIHS cannot be undertaken.

The search will remain open until the position is filled.

Location

This position is based in Bengaluru and may entail travel to other locations in India.

Review and Assessment

The role and performance of the incumbent shall be subject to normal review and assessment systems at IIHS.

Diversity Policy

IIHS is an equal opportunity employer that encourages women, people with disabilities and those from economically and socially excluded communities with the requisite skills and qualifications to apply for positions.

To apply

If you are interested to explore this opportunity with us, please fill the online application form by clicking [here](#). (You can also click on the “Apply Now” button at the end of the Job Description displayed on the website).

Contact

Please write to us at hr@iihs.co.in if you need any clarifications while filling the online application form.



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