Job Description Technical Lead – Electronic Prototyping

Centre of Excellence in Design (D-CoE) Employment
Type: Contract, Full-time

1. Role Purpose

The Technical Lead - Electronics will be responsible for planning, delivering, and overseeing applied teaching, training, and prototyping activities related to electronics and artificial intelligence within the Centre of Excellence in Design (D-CoE). The role focuses on hands-on capacity building, intern and project supervision, and coordination of technical programmes aligned with design and innovation objectives.

2. Key Responsibilities

1.2 Teaching, Training & Curriculum Execution

- Design and deliver structured training modules in electronics prototyping, sensors, actuators, embedded systems, and IoT fundamentals.
- Deliver applied sessions in machine learning, deep learning, data analytics, generative AI, and agentic AI.
- Conduct workshops and training programmes in in-person, hybrid, and online formats.
- Adapt technical content to suit learners from diverse academic and professional backgrounds.

2.2 Prototyping & Practical Implementation

- Lead hands-on electronics prototyping sessions and demonstrations.
- Guide participants in developing functional prototypes and proof-of-concept systems.
- Ensure technical accuracy, safety, and feasibility during lab and workshop activities.

3.2 Intern & Project Supervision

- Manage and mentor interns and project teams working on electronics and AI-enabled projects.
- Define project objectives, timelines, and expected deliverables.
- Monitor progress, provide technical guidance, and evaluate outcomes of intern-led projects.

4.2 Programme Coordination & Delivery

- Support end-to-end execution of training programmes, including preparation, scheduling, and technical readiness.
- Coordinate with internal teams to ensure smooth delivery of electronics and AI modules.
- Maintain quality standards across training sessions and project outputs.

5.2 Collaboration & Outreach

- Collaborate with faculty members, programme coordinators, and internal stakeholders.
- Engage with academic and industry partners for workshops, technical sessions, and outreach activities.
- Contribute to outreach initiatives aimed at expanding participation in D-CoE programmes.
- Any other duties as needed by organisation.

3. Required Skills & Competencies

1.2 Technical Competencies

- Strong practical knowledge of electronics and embedded systems.
- Hands-on experience with electronics prototyping and sensor-based systems.
- Working knowledge of:
    - Internet of Things (IoT) fundamentals
    - Machine learning and deep learning (desirable)
    - Data analytics for engineering and design applications
- Ability to translate complex technical concepts into accessible learning experiences.

2.2 Behavioural & Professional Competencies

- Strong communication and presentation skills.
- Proven ability to mentor and manage interns or junior team members.
- Organisational skills with the ability to manage multiple parallel activities.
- Collaborative mindset and ability to work in interdisciplinary environments.
- High level of ownership, accountability, and initiative.

4. Qualifications & Experience

- Age limit :45 years Maximum. Admissible age relaxation for SC, ST, OBC and PH will be extended.
- Master's in Electronics /Mechatronics Engineering.
- Excellent presentation, facilitation, and communication skills, with the ability to convey complex concepts clearly and engagingly.
- Strong organizational skills and the ability to manage multiple priorities effectively.
- Prior experience in Machine Learning basics and implementations is desirable.
- Prior experience in technical training, teaching, applied engineering, or technology-focused roles is preferred.
- Experience working in academic, innovation, or capacity-building environments is an advantage.

5. Reporting & Work Environment

- Reports to designated programme or centre leadership.
- Works closely with faculty, technical staff, interns, and external collaborators.
- Role requires flexibility to support workshops, training schedules, and outreach activities.

6. Salary:

Consolidated salary offered will be commensurate with qualifications and experience, ranging from INR 70,000/- to INR 1,20,000/- per month. Final salary determination will be based on the candidate's performance during interviews, their relevant experience, and other pertinent factors, ensuring competitive compensation aligned with qualifications and achievements.

7. General Conditions:

1. Duration: The positions are on contract and will be temporary for a period of ONE year and renewable annually for a maximum period of 5 years, based on satisfactory performance and at the discretion of the authorities of the Institute.
2. Selection Method: Interview for short listed candidates will be held at Indian Institute of Science Campus, Bangalore.
3. Applicants who possess the minimum educational qualification as on the date of advertisement only need to apply.
4. Candidates may be required to work on weekends and holidays, as workshops and events are occasionally conducted on these days.
5. No accommodation will be available on the Institute campus.
6. Admissible age relaxation for SC, ST, OBC and PH will be extended.

8. Application Process:

Interested candidates should submit their resume for the program to dcoe@fsid-iisc.in

Why Join the Centre of Excellence in Design (D-CoE)?

The Centre of Excellence in Design (D-CoE) offers a unique opportunity to work at the intersection of electronics, artificial intelligence, design, and innovation. This role enables you to create real impact by shaping hands-on learning experiences, mentoring future technologists, and translating emerging technologies into practical, real-world applications.

At D-CoE, you will work in a collaborative academic–industry ecosystem that values applied learning, experimentation, and interdisciplinary thinking. The position provides exposure to diverse learner groups, cutting-edge technologies, and high-impact capacity-building initiatives, making it an ideal role for professionals passionate about teaching, prototyping, and technology-driven innovation.