

## **Job Description: Project Officer – 3D Printing and Simulation Technologies**

Location: IIT Madras Campus

Organization: IITM Pravartak Technologies Foundation

### **Position Overview:**

We are seeking a passionate and skilled Project Officer with hands-on experience in 3D printing, simulation (ANSYS/CFD), and coding to join our dynamic research team working on Industry 4.0/autonomous factories. The selected candidate will be involved in developing a digital twin and a process twin for 3D Printers conducting advanced experiments, developing intelligent prediction models, and supporting simulation-based development using NVIDIA platforms.

### **Key Responsibilities:**

- ✓ Operate, calibrate, and maintain industrial-grade 3D printer.
- ✓ Conduct experimental trials related to additive manufacturing and material testing.
- ✓ Develop, probabilistic models for in-process print quality estimation using CFD and data driven model.
- ✓ Implement and optimize simulation workflows using NVIDIA platforms.

### **Required Qualifications:**

- ✓ B. Tech/B.E. in Mechanical Engineering/Computer Science/allied branches
- ✓ M.Tech/M.S. in Mechanical/Manufacturing/Computer Science/allied branches
- ✓ PhD/Mechanical Engineering/Computer Science/allied branches

### **Preferred-Skills**

- ✓ Proficiency in coding (Python and C#), basic scripting, and handling sensor data.
- ✓ Basic understanding of CFD/FEA simulations using ANSYS or similar tools.
- ✓ Familiarity with AI/ML-based model development is a strong advantage.
- ✓ Willing to learn NVIDIA tools.

### **Employment Type:**

Full-Time (On-site at IIT Madras)

Salary: As per industry standards and based on experience (Rs. 35,000 to Rs. 50,000 per Month)

Start Date: Immediate Joining