

IITI DRISHTI CPS FOUNDATION
(A Section 8 - Not for Profit Company)

Advt. No. – IITI-DRISHTI-CPS/Sec-8/2023/11

Date: 27 Oct, 2023

IITI DRISHTI CPS Foundation (DRISHTI CPS) was established at IIT Indore as a Technology Innovation Hub (TIH) for System Simulation, Modeling, and Visualization under the aegis of the National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS). The hub is being supported by the Department of Science & Technology, Government of India. More details about the company are available at: <http://drishticps.iiti.ac.in/>

Position: Sr. Scientific Officer/ Scientific Officer/ Jr. Scientific Officer

Roles and Responsibilities:

- Conducting research in Cyber-Physical Systems (CPS) with a focus on practical applications and technological advancements.
- Analyzing processes in domains of Healthcare/Smart Manufacturing/Agriculture/Education/Technologies for Smart Cities for improvement and optimization using digitalization and digital twin technologies.
- Designing and implementing models for simulating settings
- Developing data collection and integration strategies for accuracy
- Providing technical guidance on digital twin implementation in respective domain
- Analyzing data from digital twin models to improve processes.
- Staying updated on digitization and digital twin trends for project integration.

Project Management: Leading and managing research projects, which could involve coordinating with cross-functional teams, setting project timelines, ensuring deliverables are met, and reporting progress to higher management or funders. Collaborating with cross-functional teams to ensure proper integration of digital twin technologies into existing healthcare systems and processes.

Collaboration and Partnership: Collaborating with external organizations, such as industry stakeholders, research institutions, and government agencies, to develop partnerships, secure funding, and leverage expertise for collaborative research projects. Collaborating with researchers and stakeholders to identify opportunities for the application of digitization and digital twin technologies in Healthcare/Smart Manufacturing/Agriculture/Education/Technologies systems.

Technical Expertise: Providing technical guidance and support to junior researchers and team members, imparting domain knowledge, and staying up-to-date with the latest advancements in CPS and related fields to guide research activities.

Grant Writing and Funding: Identifying funding opportunities, preparing grant proposals, and securing funding for research projects through grants, industry partnerships, or government-funded programs.

Publication and Dissemination: Contributing to the publication of research papers, patents, and technical reports that showcase the achievements and findings of the research projects. Also, presenting research outcomes at conferences, workshops, and seminars to disseminate knowledge and build networks.

Mentorship and Training: Mentoring and guiding junior researchers, interns, or project staff by providing technical expertise, career advice, and helping develop their research skills.

Compliance and Ethics: Ensuring compliance with ethical standards, regulatory requirements, and data protection measures in all research activities.

Documentation and Reporting: Documenting research methodologies, results, and findings, preparing progress reports, and maintaining accurate records for future reference or audits.

Knowledge Exchange: Engaging in knowledge exchange activities such as organizing workshops, training programs, or industry-academia interactions to disseminate research outcomes and build collaborations.

Qualifications and Skills:

- An advanced degree (Master's with relevant experience or Ph.D. or equivalent/MBBS and higher qualifications for Healthcare domain specifically) in a relevant field such as computer science, biotechnology, bioinformatics, electrical engineering, or a related discipline.
- Expertise in digitalization and digital twin technologies.
- Strong knowledge and expertise in Cyber-Physical Systems, Internet of Things (IoT), Artificial Intelligence (AI), Machine Learning (ML) and other upcoming technologies.
- Proficiency in data analysis and modeling techniques.
- Proven research experience with a track record of published papers in reputable journals or conferences.
- Excellent project management skills, including the ability to set and meet deadlines, manage resources efficiently, and oversee multiple projects simultaneously.
- Proficiency in programming languages, simulation tools, and relevant software used in CPS research will be a add on.
- Strong analytical and problem-solving skills to tackle complex challenges.
- Outstanding communication skills, both written and verbal, to effectively present research findings, collaborate with internal and external stakeholders, and engage in knowledge exchange activities.
- Ability to work independently, as well as in a team-based research environment.
- Flexibility to adapt to changing research priorities and work on interdisciplinary projects.
- Familiarity with grant writing, proposal development, and securing funding in the research domain.

Compensation: As per industry standards.

Interested candidates may [click here](#) to submit the application.

Only shortlisted candidates will be called for a written test/interaction/interview. Mere fulfillment of the eligibility criteria does not entitle an applicant to be shortlisted. All the applications will be thoroughly evaluated for suitability with the company's requirements. The company reserves the right to not fill up /cancel the post advertised without assigning any reason. The position is contractual, full time in nature and subject to periodic performance reviews.