



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

Advt. No. – IITI-DRISHTI-CPS/Sec-8/2025/17

Date: 16th December 2025

About DRISHTI CPS

IITI DRISHTI CPS Foundation is a DST-supported Technology Translation Research Park working at the intersection of **Digital Healthcare, CPS, Data Modelling, AI/ML, and clinical device innovation**. The Foundation develops and deploys solutions in:

- AI/ML-driven screening, diagnosis, treatment & rehabilitation
- IoT-enabled healthcare devices
- Data modelling, simulation & Digital Twin frameworks
- Digital health platforms (including the in-house CharakDT)
- Translational research, TRL enhancement, and commercialization

Job Title: Chief Technology Officer (CTO)

Job Location: IIT Indore Campus, Simrol, Madhya Pradesh

Reports To: Chief Executive Officer (CEO)

No. of Position: 1

Roles and Responsibilities

1. Technology Strategy & Leadership

- Define the technology roadmap in Digital Health, AI/ML, IoT-based devices, Digital Twin systems, and clinical technologies.
- Drive long-term R&D direction for platform architecture, device engineering, and data infrastructure.

2. Product & Platform Development

- Lead development of the CharakDT platform and associated clinical AI tools.
- Oversee creation of interoperable, secure and scalable architectures for:
 - hospital-facing systems
 - IoT-driven medical devices and sensors
 - digital twin models for patient monitoring, clinical simulation, and therapy optimization



3. AI/ML, Data Modeling & Digital Twin

- Develop and operationalize:
 - predictive models and risk scores
 - digital biomarkers
 - simulation models and **Digital Twin frameworks** for health conditions, devices, or workflows
- Ensure clinically validated model performance, robustness, interpretability and safety.

4. Medical Device Engineering & IoT

- Lead design, prototyping, and validation of **IoT-enabled medical devices**, including embedded systems, sensor integration, and firmware development.
- Oversee signal processing pipelines for physiological data (ECG, PPG, EMG, audio, respiration, etc.).
- Ensure medical compliance, device testing, and regulatory readiness.

5. Technology Translation & TRL Progression

- Guide TRL progression of in-house technologies, supported researchers, and start-ups.
- Map research outputs to deployment pathways: prototype → pilot → scale → commercialization.

6. Team Leadership

- Mentor multidisciplinary teams (AI, software, device engineering, data science, product).
- Build processes for engineering excellence, quality, documentation, and deployment.

7. External Partnerships & Engagement

- Work with clinicians, hospitals, industry, state/central government bodies, and academic groups.
- Support national and international collaborations, pilots, and scale-up deployments.

8. Compliance, Security & Quality

- Ensure compliance with:
 - digital health data standards (NDHM/ABDM, HL7/FHIR)
 - device standards (ISO 13485, IEC 60601)
 - cybersecurity, privacy, and data safety requirements

Essential Qualifications

- Ph.D. in Engineering/Sciences and/or Master's degree in Medicine or Surgery (MD/MS)
- A minimum of 3 years of professional experience after PhD/MD/MS.
- Relevant experience in technology development, AI/ML, product engineering, or healthcare devices



Preferred / Desirable Experience

- Demonstrated experience in:
 - IoT-based product development and deployment
 - Digital Twin concepts applied to healthcare, devices, or system simulation
 - AI/ML model development and validation
 - Signal processing of biomedical data
 - CPS systems, embedded systems, sensor integration
 - Medical device development and regulatory pathways
 - Healthcare interoperability (FHIR, HL7, DICOM)
 - Clinical workflow design and hospital IT systems
- Experience taking products from concept → prototype → validation → deployment.
- Ability to coordinate with clinicians, hospitals, government stakeholders, start-ups, and industry R&D teams.

Attributes

- Strong systems thinking and architecture skills.
- Mission-driven, quality-focused, and execution-oriented.
- Excellent communication skills with ability to interface with technical and clinical teams.
- Willingness for travel for deployments, validation studies, and collaborations.

Compensation: 20,00,000-25,00,000 Per year

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. In the case of selection, the role will be finalized by the selection panel and the decision will be binding. The position is contractual, full-time in nature and subject to periodic performance reviews.