ADVERTISEMENT
FOR
COMPUTER VISION ENGINEER
AT
IIT MANDI IHUB AND HCi FOUNDATION
A Section – 8 Company
Location – IIT Mandi Campus

About IIT Mandi iHub and HCI Foundation: About iHub: IIT Mandi iHub and HCi Foundation (iHub) is a section 8 company established under the National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS). The focus area of IIT Mandi iHub is **"Human-Centered AI" (HCAi).** The vision of the iHub is to be an internationally recognized hub that nurtures HCi research, enables technology translation for industry, and scales skill development. The four areas of IIT Mandi iHub are Research and Technology Development, Skill Development, Incubation & Acceleration, and Collaboration. For more information, visit www.ihubiitmandi.in

Applications are invited for the position of Computer Vision Engineer

Apply Here: https://form.typeform.com/to/ORZHHN23

The Role

We are seeking a highly motivated **Computer Vision Engineer** to work on advanced problems in **3D vision and multimodal AI** within the Multimodal Intelligence and Real Applications (MIRA) Lab. The role focuses on designing and deploying robust pipelines for **multi-view capture, multimodal synchronization, and multimodal data fusion**, enabling large-scale, high-quality data generation and AI model development. The candidate will work on bridging theory and practice by implementing state-of-the-art computer vision and deep learning techniques into scalable, production-ready systems, through engagement in industry projects.

Responsibilities:

o   Design and develop algorithms for **3D vision and multi-view geometry**, including camera calibration, triangulation, 3D reconstruction, and motion estimation.

o   Build and optimize pipelines for **multimodal synchronization**, ensuring precise temporal alignment across video, audio, and sensor streams.

o   Implement **multimodal fusion techniques** (early/late fusion, feature-level fusion) for tasks such as human behavior understanding and scene analysis.

o   Develop scalable data pipelines for **large-scale multimodal datasets**, including preprocessing, annotation workflows, and quality assurance.

o   Train and deploy deep learning models for computer vision tasks such as detection, tracking, segmentation, and spatiotemporal modeling.

o   Work with multi-sensor systems (multi-view cameras, motion capture systems, EEG/audio streams) and ensure seamless integration between hardware and software components.

o   Optimize performance across the stack using **GPU acceleration, parallel processing, and efficient memory management**.

o   Translate research prototypes into **robust, maintainable, and production-ready pipelines**, ensuring reliability and scalability.

o Collaborate with interdisciplinary teams and external partners to deliver **end-to-end solutions for real-world applications**.

Essential Qualification:

o Bachelor's or Master's degree in Computer Science, Electrical Engineering, Robotics, or a related field.

Position	Qualification	Years of Experience
Computer Vision Engineer	Bachelor's in Computer Science, Electronics, Electrical Engineering, or a related field.	3-6 years
	Master's degree in Computer Science, Electronics, Electrical Engineering, or a related field.	1-2 Year

Desirable Experience:

o Strong foundation in 3D computer vision and geometric methods, including multi-view geometry, SfM, SLAM, and camera calibration.

o Extensive hands-on experience with deep learning for vision, including spatiotemporal modeling and video understanding.

o Proficiency in Python with strong experience in frameworks such as PyTorch/TensorFlow and libraries like OpenCV.

o Experience with multi-sensor systems and multimodal data, including synchronization, calibration, and fusion across modalities.

o Strong experience with GPU computing (CUDA), high-performance pipelines, and large-scale data processing.

o Familiarity with motion capture systems, signal processing (audio/EEG), or real-time systems is highly desirable.

Remuneration:

CTC up to INR 9,28,800 per annum, inclusive of applicable annual benefits.

Terms/Instructions:

1. *Only shortlisted candidates will be contacted/informed through email/phone.*
2. *IIT Mandi iHub and HCi Foundation reserves the right to fill up the post, not to fill up the position or cancel the advertisement in whole or part without assigning any reason. The company also reserves the right to limit the number of candidates to be called for written tests/or interviews. The decision of the company in this regard will be final.*
3. *Documentary evidence of all educational and professional qualifications will be required to be produced when specified.*
4. *The company can verify the antecedents or documents submitted by a candidate before the*

appointment, at the time of appointment, or during the tenure of the service. In case it is detected that the documents submitted by the candidates are fake or the candidate has clandestine antecedents/background and has suppressed the said information, then their services shall be terminated.

5. *If it is found later that any information given in the application is incorrect/false, the candidature/ appointment is liable to be cancelled/terminated.*

6. ***The applications will be considered till the post is filled.***

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Website: www.ihubiitmandi.in

Note: All applications should be routed through the application link provided for each position in the advertisement. Email us only in case of questions.