(a) Contribution to the Institute:

I aim to contribute to IIT Gandhinagar by leveraging my over 20 years of experience in CAD/engineering research and software innovation, with a focus on artificial intelligence (AI). As a Professor of Practice, I plan to impart practical insights and foster a nuanced understanding of AI, particularly in areas such as machine learning, natural language processing, and geometric modeling. My commitment to guiding individuals and organizations in effectively utilizing AI aligns with the Institute's ethos, and I aspire to play a pivotal role in enhancing the academic and research landscape.

(b) Pedagogical Innovations:

My pedagogical approach emphasizes a blend of theoretical understanding and hands-on application. I propose to integrate real-world case studies, collaborative projects, and industry-relevant examples into the curriculum. Leveraging my teaching experience in geometric modeling and machine learning, I plan to create an engaging learning environment that prepares students for the evolving demands of AI. Additionally, fostering interdisciplinary connections within the institute and incorporating emerging trends in AI will be integral to my pedagogical innovations.

(c) Engagement with Students, Faculty, and Industries:

To engage students, I envision mentorship programs, guest lectures, and workshops that bridge the gap between academia and industry, predominantly conducted online. Virtual platforms will facilitate seamless interaction and networking opportunities, ensuring accessibility for all. Collaborations with faculty members on research projects can transcend physical boundaries, fostering a globalized academic environment. For industry engagement, online partnerships, virtual internships, and collaborative research projects will be explored. Additionally, while my mode of engagement will mostly be online, I propose dedicating a week each semester for in-person sessions on campus. This on-site presence aims to enhance personal connections, facilitate hands-on workshops, and strengthen the Institute's ties with industry stakeholders.

(d) Resource and Support Requirements:

To effectively contribute to the Institute, I would require access to state-of-the-art computing facilities, AI-specific software, and datasets for research and teaching purposes. Additionally, support for organizing workshops, seminars, and industry collaborations would be beneficial. Encouraging a culture of continuous learning may involve professional development opportunities for faculty. Collaborative spaces for interdisciplinary research and a platform for sharing educational resources would further enhance the teaching and research ecosystem at IIT Gandhinagar.