

INNOVATE-A-THON Problem Statements

1. Smart Waste Management System

Description: Develop a solution that utilizes IoT sensors and data analytics to optimize waste collection and disposal processes in urban areas. The system should be able to monitor trash levels in bins, optimize collection routes, and promote recycling practices.

2. Virtual Health Assistant

Description: Create a virtual health assistant application that uses AI and natural language processing to provide personalized health recommendations, track fitness goals, remind users of medication schedules, and offer real-time assistance for common health queries.

3. Remote Learning Platform Enhancement

Description: Enhance existing remote learning platforms by integrating features such as AI-based personalized learning paths, interactive virtual classrooms, real-time student engagement analytics, and tools for collaborative projects and assessments.

4. Financial Wellness App

Description: Develop a mobile application that promotes financial literacy and well-being among users. The app should include features such as budget tracking, expense categorization, goal setting, investment education, and personalized financial advice based on individual spending habits.

5. Facial Recognition for 3D Modeling

Description: Build a system capable of converting 2D facial images into accurate 3D models. This technology could find applications in various fields including virtual reality, gaming, facial animation, and personalized product fitting. The system should be robust, efficient, and capable of handling different facial expressions and lighting conditions.

Note: The above problems are just sample statements. Participants may either choose them or may take inspiration from them and come up with something totally new.