ARTIVERSE 2K25

PROBLEM STATEMENTS

1) Deploy AR/VR for the help in the field of education to visualize the concepts of science and technology for the better understanding of students.

2) Design and development of surgical augmented reality setups, and surgical digital library platforms.

3) AI based Automatic alarm generation and dropping of payload at a particular object through a Drone.

4) Drone-based surveillance system for the vessels flying in port areas and encroachments.

5) Identification of place names from a natural language sentence.

6) Create an AI-powered platform for delivering interactive security awareness training modules to employees, educating them about common cyber threats, best practices for secure behavior.

7) Create an AI-driven spam filtering system for emails to automatically identify and move spam messages to a separate folder, reducing the risk of users clicking on malicious links or downloading harmful attachments.

8) Develop an AI-based tool to assess the strength of passwords used by individuals or within an organization, providing recommendations for stronger password creation to enhance overall security posture.

9) Create an interactive cybersecurity training game or simulation for educating users about common cyber threats, security best practices, and incident response procedures in an engaging and immersive way.

10) Create a system to recognize and understand local dialect by Computer or other IT devices to deliver voice.

11) Development of Technology for manufacturing of mind control BIONIC hand with a sense of touch.

12) Use generative AI to create or evolve game mechanics, characters, or your favorite game, or share an idea for a new game from scratch.

13) Smart Applications for Medicinal Plants Information.

14) IoT Based Smart Waste Management System for Smart City.

15) Build a chatbot using natural language processing techniques to provide customer support or answer FAQs.

16) Create a machine learning-based system for personalized healthcare recommendations based on genetic data and lifestyle factors.

17) Develop a hardware platform for real-time object detection and tracking using deep learning algorithms.

18) Design a brain-computer interface device that interprets neural signals for controlling external applications.

19) Develop AR/VR applications that are fully accessible to people with disabilities, including those with visual, auditory, mobility, and cognitive impairments.

20) Develop an OpenCV-based Python application for dynamically adjusting screen brightness through hand detection, optimizing user experience and accessibility.

21) Build a machine learning algorithm for optimizing supply chain logistics and inventory management.

22) Create a Convolutional Neural Network (CNN) model for accurately recognizing hand gestures in real-time, facilitating intuitive interaction with electronic devices and applications.

23) Develop a fast-food ordering chatbot with database integration to store orders and real-time tracking functionality for customers and businesses, addressing inefficiencies in traditional ordering methods and enhancing the overall ordering experience.

24) Create an emotion-based music player utilizing Recurrent Neural Networks (RNNs) to analyze user emotional cues from input text or speech, enabling personalized music recommendations tailored to the user's mood and emotional state.

25) Design and develop an AI-powered chatbot for the technical education department.

26) Develop a computer vision project for hand sign recognition, enabling real-time interpretation of sign language gestures for communication accessibility, assistive technologies, and human-computer interaction.

27) Build a deep learning model for automated video content moderation, detecting and filtering out inappropriate content.

28) Develop a robotic system with embedded AI for autonomous navigation and object manipulation.

29) Develop a self-learning industrial robot for flexible manufacturing tasks using reinforcement learning algorithms.

30) Design a deep learning model for music generation or composition based on existing songs.

Note:

- Other ideas based on the provided problem statements can be submitted within the given themes.
- Innovative ideas are accepted.
- Abstract should be in the given format.
- Kits/Simulation Tools Can be used.
- Teams should bring their needed kits.