amazon

Most Awaited Tech Hackathon

Case Study

Theme 1: Virtual Customer Service

Problem statement – Build a next-generation multi-lingual virtual customer service solution powered by Large Language models (LLM) and Deep learning algorithms. The goal is to enable seamless, natural communication over the phone, offering quicker query resolution without the limitations of traditional chatbots. Implement sentiment analysis to better understand customer emotions and adjust the agent's responses accordingly, improving the overall experience and service quality. By implementing LLM, Gen AI, IVR, and Text-to-Speech capabilities, Amazon can streamline customer support while optimizing costs.

Theme 2: Visual AI and Ecommerce

Problem statement - Develop an enhanced shopping experience by leveraging visual AI technology to improve product search, recommendations, and item identification in text, image or video content. Improve search functionalities and provide personalized product recommendations using image recognition and computer vision technology. Extend the X-ray feature from Amazon Prime Video to enable users to identify and directly purchase items featured in the video content, such as furniture, clothing, and other products. The goal is to create a more seamless, personalized, and engaging shopping experience for customers by harnessing the power of visual AI and computer vision technologies.

Theme 3: Fraud Detection and Prevention

Problem statement – Develop AI-powered solutions to enhance the integrity of product ratings and reviews, and to strengthen counterfeit detection throughout the product lifecycle on the Amazon platform. The overarching objective will be to develop innovative AI-driven solutions that can improve the integrity and trustworthiness of the Amazon platform, safeguarding both customers and legitimate sellers from fraudulent activities. The key elements of the problem statement area) Leveraging language AI and large language models (LLMs) to detect fraudulent or suspicious product ratings and reviews on Amazon. The goal will be to build applications that can analyze sentiment, identify patterns, and ultimately protect the trust of Amazon's customers in the e-commerce ecosystem b) Enhancing Amazon's existing counterfeit detection capabilities by leveraging AI across the complete product lifecycle - from the listing of products to the processing of customer returns. The aim will be to further strengthen Amazon's ability to prevent counterfeit products from ever entering their store.

Theme 4: Personalized Payment Experiences and Financial Management

Problem statement – The key problem around payment arena include developing an AI-powered chatbot solution to automate the handling of customer payment queries, creating an automated budgeting solution that allows customers to set purchase amount limits for the year, get notifications when they reach certain thresholds, track their savings on a yearly, monthly, and overall basis, and monitor their spending across different product categories, as well as designing an AI-generated recommendation engine that suggests the best payment method for each customer purchase based on their past payment history, current success rates, available cashbacks, and the costs of different payment options.