

NGIT 2nd Year Projects List

Domain	Project Title	Abstract	Technologies
DL	Automated Intelligent Assessment System	The proposed project aims to develop an automated intelligent assessment system using Deep learning (DL) which will adjust the difficulty level of questions based on the student's capability. The system will use DL to learn from the student's responses to previous questions and adjust the difficulty level of future questions accordingly, this will lead to a more personalized and efficient assessment process. The system will be trained on a dataset of student responses and corresponding scores, and then evaluated for its ability to adapt to individual student's capabilities. This project will require expertise in DL and assessment systems, as well as access to a dataset of student responses. The benefits of this system include providing a more personalized learning experience and improving the efficiency of the assessment process.	MERN, Deep Learning
AI	Voice enabled Appointment Scheduler	Voice enabled Appointment Scheduler would be using Alexa to create a hands-free and convenient way for users to schedule appointments and manage their schedule. Many people have busy schedules and struggle to keep track of their appointments, which can lead to missed appointments and wasted time. By integrating Alexa into the scheduling process, users can easily manage their schedule and free up time for more important tasks. The solution should be user-friendly, efficient, and accurately interpret user commands to ensure that appointments are scheduled correctly	Amazon Web Services, Alexa Skill Kit, MERN
Cyber Security	Malware analysis tool	Design and develop a technological solution for the detection and prevention of Fileless Malware (a type of malicious software that uses legitimate programs to infect a computer). The solution may be in the form of a desktop or mobile application.	MERN
Cyber Security	Autonomous AI based threat detection and threat elimination engine to block ransomware and zero-day attacks	Ransomware attacks poses great threat to Cloud services and are capable of locking the service with or without damage of system files. Further, zero-day attacks can exploit the vulnerability in the cloud service till the vulnerability is detected by developer and fixed. The solution must provide an AI-powered alert management system that can automatically detect problem ransomware & zero-day attacks and help reduce the workload of security analyst. The solution must have analytics section to measure its performance by evaluating false positives.	MERN
DL	Automated License Plate Recognition for Traffic Enforcement	The objective of this problem is to improve the efficiency and accuracy of the challan issuance process by automating the image processing and database lookup steps. This can potentially improve the enforcement of traffic laws and reduce the workload of the police. The solution to this problem may involve the use of advanced computer vision techniques, such as Optical Character Recognition (OCR) and Automatic Number Plate Recognition (ANPR) cameras, as well as the integration of these techniques with the police's existing databases and systems.	MERN, Deep learning
Cyber Security	Forensics data recovery from flash memory	Current forensic tools for examination of embedded systems like mobile phones and PDA's mostly perform data extraction on a logical level and do not consider the type of storage media during data analysis. This paper suggests a low level approach for the forensic examination of flash memories and describes three low-level data acquisition methods for making full memory copies of flash memory devices. Results are presented of a file system study in which USB memory sticks from 45 different make and models were used. For different mobile phones is shown how full memory copies of their flash memories can be made and which steps are needed to translate the extracted data into a format that can be understood by common forensic media analysis tools. Artifacts, caused by flash specific operations like block erasing and wear leveling, are discussed and directions are given for enhanced data recovery and analysis on data originating from flash memory.	Flash Technology, Twister series flasher box