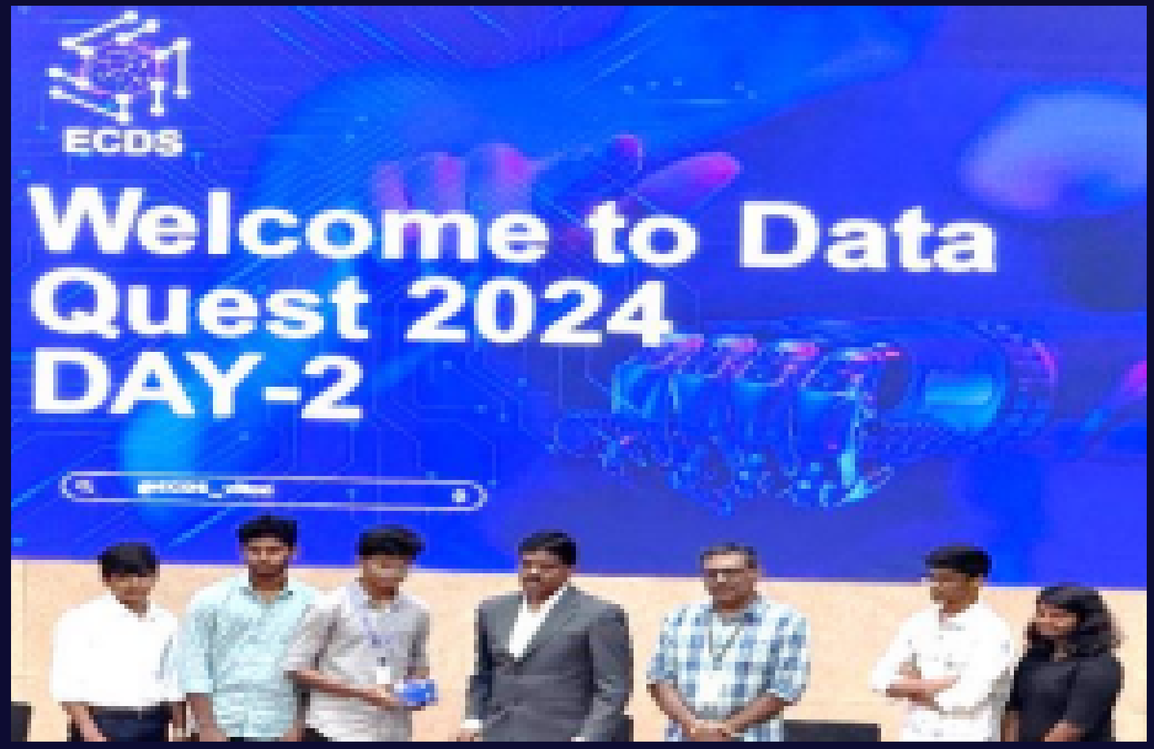
ACHIEVEMENTS

Department of Artificial Intelligence and Data Science

DATA QUEST – Vellore Institute of Technology

Event Name: DATA QUEST
Event Date: 11.09.2024 -12.09.2024
Domain: DS/ML
Title: ML -Based Investment on banking
Team Members: Ms. Akshaya
Mr. Jalley Antony Raj
Mr.Karthickraja
Mr.Roshanth
Mr.Yuvavigneshwaran



On 11th September 2024, The AI&DS Department students Akshaya , Jalley Antony Raj , Karthickraja , Roshanth and Yuvavigneshwaran participated in DATA QUEST' 24 at Vellore Institute of Technology, Chennai. Their proposed project, titled "ML-Based Investment on banking " focused on developing a model to predict customer subscription to bank products after a marketing campaign .They secured 2nd runner up among 50 teams

Team Furious Five (Project : ML-Based Investment on banking)

1.1.2 Data Quest ’24 – Vellore Institute of Technology

Event Name: DATA QUEST

Event Date: 11.09.2024 -12.09.2024

Domain: DS/ML

Title: ML-Based model to predict which customer’s credit card are at risk of churn and suggest proactive measures for ret

Team Members: Mr.Ezhiloviyan
Mr. Harish
Mr. Madheshwaran
Mr. Rubesh
Mr. Sandeep

On 11th September 2024, The AI&DS Department students Ezhiloviyan , Harish , Madheshwaran , Rubesh and Sandeep participated in DATA QUEST’ 24 at Vellore Institute of Technology , Chennai . Their proposed project, titled "ML-Based model to predict which customer’s credit card are at risk of churn and suggest proactive measures for retention " focused on developing a model to predict which customer’s credit card at risk of churn and suggest proactive measures for retention .They secured 1st runner up among 50 teams

Team Dino (Project : ML-Based model to predict which customer’s credit card are at risk of churn and suggest proactive measures for retention)

1.2 RACKATHON – RAKUTEN INDIA

Event Name: RACKATHON – RAKUTEN INDIA
Event Date: 30.08.2024 -31.08.2024
Domain: AI/ML
Title: AI-Based Shopping Assistant
Members: Ms. Jeevikha
Mr. Joshua
Mr. Logamanyan
Mr. Manoj Kumar

The members representing the AI&DS Department from Karpagam Academy of Higher Education , Coimbatore have participated in the Rackathon event and presented their project idea in the initial round. After a rigorous selection process, they were shortlisted among the top 100 teams, which allowed them to progress to the final round of the event .Their proposed project, titled "AI-Based Shopping Assistant" focused on creating an intelligent shopping assistant. Participating in Rakathon 2024 was an enriching experience that provided them with the opportunity to showcase their project alongside other talented individuals and teams

Team Tech titanz (Project : AI-Based Shopping Assistant)

1.3 Taiwan Internship Programme – Southern Taiwan University of Science and Technology

Duration: 19.02.2024 - 24.05.2024
Domain: Machine Learning, Deep Learning
Title: Spam Message Detection using Machine Learning
Team Members: Mr. Niran Subramanian
Mr. Nishanth
Mr. E.Vignesh
Mr. Karthick

Niran Subramanian (2nd year) of CSE department, Nishanth and Vignesh (2nd year) of AI&DS department, Karthick (3rd year) of CSE department, under the guidance of Dr. Shu-Chen Cheng attended an internship at Southern Taiwan University of Science and Technology, Taiwan. The students worked on the project titled ‘Money-related Spam Detection using Machine Learning ’. The project aims to detect scam in text message and notify the user whether the given message is spam or not. Techniques like tf-idf vectorizer and cosine formula was used in augmentation of the text

1.4 BODY BUILDING

Event Name: Mr.RGF
Event Date: 13.03.2024
Participant : Magendiran Raj.R
Domain: SPORTS

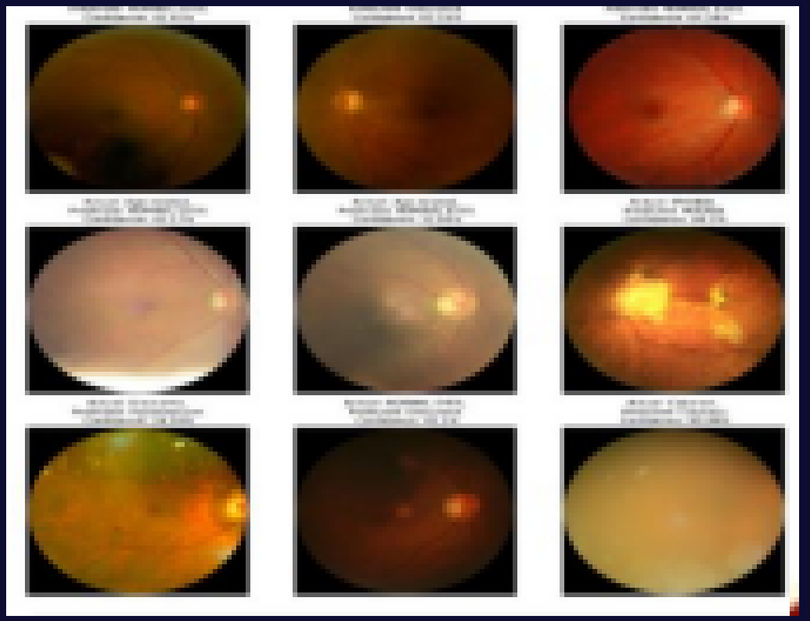
On march 13th 2024 Mr.R Magendiran Raj has secured the fourth place in the Junior men’s physique category at the Mr.RGF classic 2024 Bodybulding and physique competition held at Rathinam Group of Institution, Coimbatore

It’s all about 10 Days dedication Strict diet only chapati with 10 white egg last two days water supply cut (day before the competition)

STUDENTS PROJECT

2.1 Ocular Retina Disease Detection

Members: Mr.D.Giri
Mr.W.Judah Blesson
Mr.L.Larson Albin
Mr.G.Michael Nirmal
Mr.V.Nithin
Mr.E.Vignesh



This project aims to develop an AI-powered deep learning model, RETFound, for diagnosimg ocular disease and predicting systemic health risks fromretina image. By leaveraging self-supervised learning,the model achieves high accurancy and scalability, fostering global collaboration in early disease detection and treatment. Key features include training on 10,000 NHS retinal image, using self-supervised learning without manual labeling , ensuring high diagnostic accurancy and scalability and being open-source to encourage worldwide collaboration. Expected outcome are an accurate, scalable AI model for retinal disease detection, open-source availability of RETFound, and improved early detection and treatment of ocular disease. Technologies used : Model Building Frame work & libraries: Tensor flow , CNN, data augmentation, TensorFlow Dataset Backend Serving & API: TensorFlow Serving, FastApi Model optimization technique: Quantization, tensorFlow lite Frontend & Deployment Technologies:React Native , Google Platform (GCP)

2.2 AI Hand gesture

AI-Powered Gesture Control for Presentations Using OpenCV and MediaPipe

Members: Mr.K.R.Dhyanesh Krishna
Mr.M. Karuppusamy
Mr.G.Rithik roshan
Ms.V.Anushya devi
Ms.N.Aaradhya
Ms.B.Gayathri

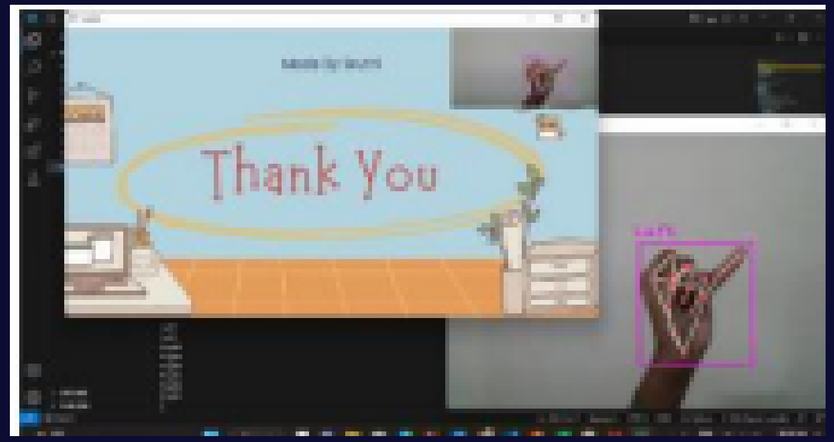
Science Expo 2024

Venue: Karpagam Academy of Higher Education

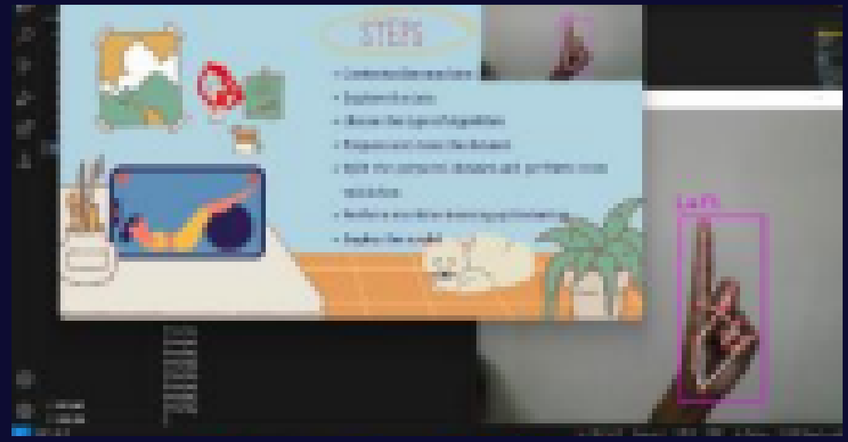
The Science Exhibition Expo 2024 was one of the highly awaited events, and our team was honored to present an innovative project titled "AI-Powered Gesture Control for Presentations Using OpenCV and MediaPipe." The event is scheduled to take place at Karpagam Academy of Higher Education. Project Description : Our project is based on OpenCV and MediaPipe. OpenCV is one of the leading opensource computer vision libraries. And on the other hand, MediaPipe is the latest framework in this era related to machine learning. With the help of this system, users can operate PowerPoint slides by simple hand gestures without any physical remote or keyboard control. Thus, the presenters may easily focus on their audiences instead of remote controls during such presentations. Bringing a glimpse of the future of human-computer interaction into like presentations through real-time hand detection and gesture recognition, the project gives an outline of the working

With regard to the process, it has provided an intuitive and futuristic approach toward control. Participation in the Science Exhibition Expo 2024 was extremely rewarding because we were able to get really great insights and good feedback from the different people who attendedthe peers and the experts. The kind of interest and enthusiasm displayed by visitors went a long way in confirming whether AI-powered solutions have relevance and potential in enhancing human interaction with technology. We demonstrated not only technical details but also valuable communication and presentation skills by making many complex concepts clear for the guests. The fantastic team collaboration from coding to live demonstration enabled us to develop strong teamwork and problem-solving skills within the team. We took pride in being able to apply class learnings to real life while paving the way for future innovations. Overall, the Science Exhibition Expo 2024 was a memorable experience with our journey associated with AI-powered gesture control, which will indeed continue to inspire further changes in the tech world.

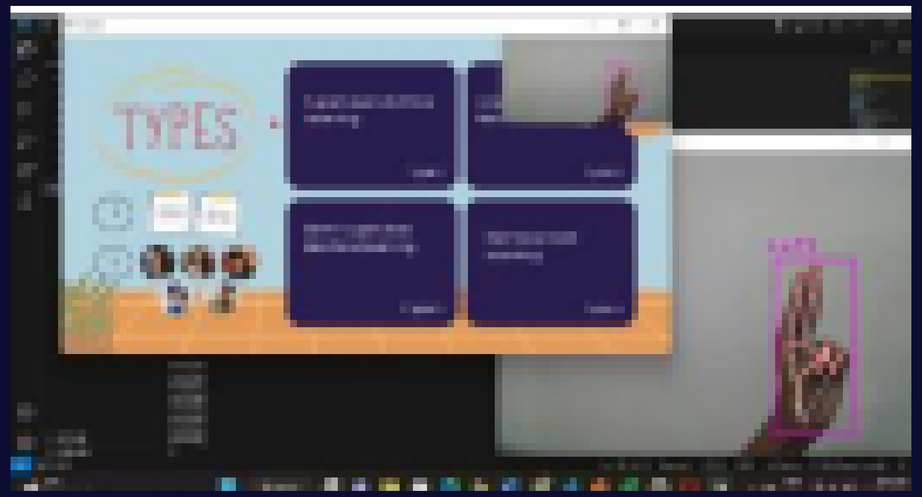
Here are the implementation picutures for better understanding



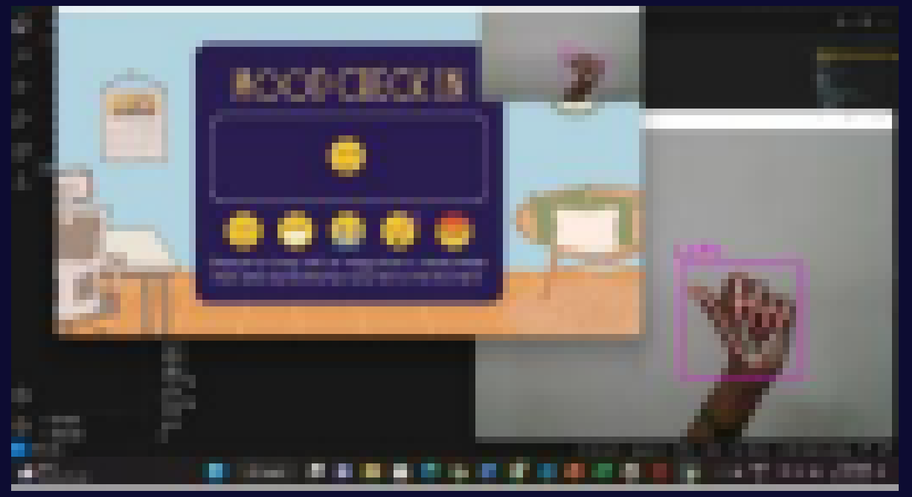
Gesture 1: Little Finger – Move to Next Slide



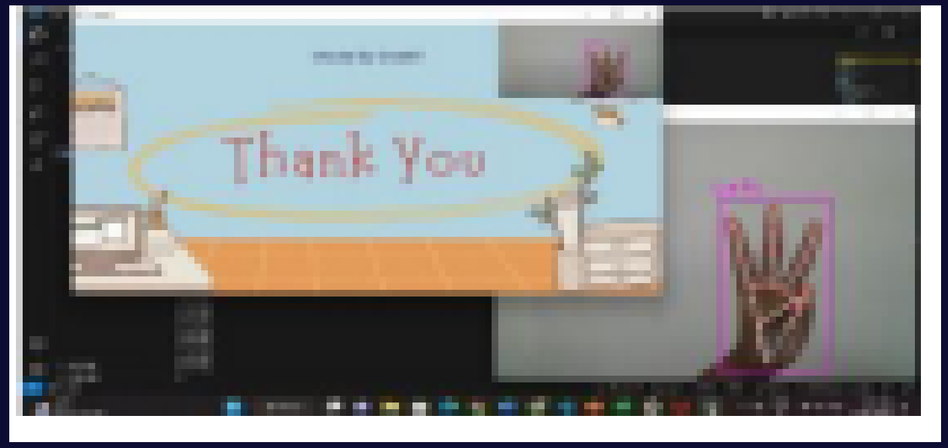
2: Thumb Finger -Move to Previous Slide



Gesture 3: Index Finger and the Slide Middle finger Together Holding the pointer



Gesture 4: Thumb Finger –Move to



Gesture 5: Middle Three Fingers – Erase/Undo the Previous Draw