### Department of Computer Sc. & Engineering

# <u>List of Offered Projects for MCA 3<sup>rd</sup> Semester – Autumn 2022</u>

<b>Topic 1:</b> Research	publication	database of	faculty mem	bers and students

**Topic 2:** Student Mentoring system

**Topic 3:** Mood detection using EEG sensors applying Machine Learning (Prior idea of IoT and Machine Learning is helpful)

**Topic 4:** Audio Book development and access facility through User-friendly interface.

**Topic 5:** IoT-enabled test bed development for Lab Monitoring and Intrusion Detection.

**Topic 6:** Food Spoilage Detection in near real time.

**Topic 7:** Classification of Psychiatric disorders on Neuroimaging data using Deep learning.

**Topic 8:** Breast cancer detection using Deep Learning

**Topic 9:** Self-supervised learning for Biomedical image segmentation

**Topic 10:** AI for handling respiratory diseases

**Topic 11:** Federated learning for privacy-aware medical systems

**Topic 12:** Geometric machine learning in Computer vision

**Topic 13:** Mentor-mentee record keeping system

**Topic 14:** A study on effect of Screen Time on Learning Ability

**Topic 15:** Project 1. information system for sports facility using mysql and php (No development tool will be allowed to use)

## Objectives for Topic 14 & Topic 15 are

- Objective 1: To learn about Mysql [PO8-3, PO7-3, PO6-1, PO10-1, PO5-1, PO2-1]
- Objective 2. To learn about Php and its dependency on webserver [PO8-3, PO7-3, PO6-1, PO10-1, PO5-1, PO2-1]
- Objective 3: To apply the SE concepts (SRS, ER and DFD) in real life problems (PO1-3, PO3-2, PO6-3, PO7-3]
- Objective 4: To prepare a technical report [PO4-3, PO1-1, PO2-1]

#### **Evaluation milestones**

- Finalizing SRS
- Finalizing ER
- Finalizing DFD
- Preparation of Relational tables and data dictionary
- Creation of Tables in Mysql and setting the constraints
- User interfaces using PHP as per finalized DFD

**Topic 16:** Development of an OTP based Students Self Registration and authentication system using Tezpur University email server.,

**Topic 17:** Design of a Role based Students Feedback System.

Topic 18: Paperless application processing in an office

**Topic 19:** Facility maintenance alert and tracking in an office

# **Department of Computer Sc. & Engineering**

<b>Topic 20:</b> Feature selection		
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Topic 21: Texture filtering		
Topic 22: Tezpur University Computer Society Website Development		
Topic 23: Context sensitive based Next Word Prediction in Smartphone		
Topic 24: Web-based tool for summarizing broadcast news		
Topic 25: A tool for query-based audio retrieval		
Topic 26: Automated Project allocation system		
<b>Topic 27:</b> Web based application		
<b>Topic 28:</b> Online form submission portal for Tezpur University admission		
Topic 29: Machine learning for GBC classification		
<b>Topic 30:</b> Machine learning for image segmentation and disease prediction		
Topic 31: Data Analysis in disease biomarker prediction		
Topic 32: An automated paper-reviewer assignment system in Academia		
Topic 33: A community-based Influence Maximization in complex social networks		
Topic 34: Identifying serendipitous collaborators in Scholarly Big Data		

To submit your project preferences, follow the link: <a href="https://forms.gle/97Ry8NpBo5Vo4G169">https://forms.gle/97Ry8NpBo5Vo4G169</a>