**REAL-TIME HANDS-ON PROBLEM SOLVING PROJECTS**

**VERTICLES:**

1. MACHINE LEARNING
   1. Heart and Blood pressure disease prediction
   2. COVID-19 detection through x-ray
   3. Character detection
   4. Handwriting to text conversion
   5. Recommendation System
2. DATA MINING
   1. HR analysis
   2. Visualization tools for Big Data
   3. Speech analysis
   4. Marketing Analysis
   5. Stock Market Analysis
3. IMAGE PROCESSING
   1. Traffic management and control system
   2. Parking system
   3. Attendance using facial recognition
4. NATURAL LANGUAGE PROCESSING
   1. Speech recognition system
   2. Speech to Text & Text to Speech
   3. Text Summarization
   4. Virtual Translator
5. WEB DEVELOPMENT
   1. Review System
   2. Social Networking (for campus)
   3. Billing System
   4. Travel Guide
6. ANDROID APP DEVELOPMENT
   1. Expense Manager
   2. Find lost devices
   3. Parking location finder
7. CYBERSECURITY
   1. Monitor remote system in the same network (Labs)
   2. Detect Phishing attacks and Debit/Credit card activity

8. IOT

* 1. Home automation
  2. Anti-theft systems
  3. Pet monitoring
  4. Plant caring
  5. Automate farming activities
  6. Smart Parking System

9. Software Engineering

a. Software testing

b. Software effort and cost estimation

c. Fault and bug prediction

d. Automated req. Analysis