
Education

Vellore Institute of Technology , Bhopal

2023-2027

Bachelor of Technology (BTech) - CSE(specialization in Gaming Technology)

8.66/10

Relevant Coursework: Data Structures & Algorithms, DBMS, Operating Systems, Computer Architecture, Linear Algebra, Differential Equations, Probability & Statistics, Human Computer Interaction

Projects (GitHub: [Rid-agni](#))

E-Adapt: Predicting Student Adaptability in Online Classes

- **End-to-End ML Pipeline:** Designed for predicting student adaptability levels in online education environments.
- **Model Comparison & Optimization:** Evaluated multiple classification models; selected Random Forest with hyperparameter tuning.
- **High Accuracy:** Achieved 91% accuracy and F1-score of 0.89 on the final model.
- **User Interface Integration:** Developed a frontend to input student data and display real-time predictions.
- **Education-Oriented Impact:** Supports educators in making data-driven decisions to enhance online learning outcomes.

YOLOv7-Based Threat Detection System

- **Object Detection:** Built a threat detection system using YOLOv7 trained on a custom weapon dataset.
- **Multi-Class Recognition:** Detects 9 weapon types including rifles, handguns, knives, grenade launchers, and more.
- **Optimized Input:** Trained with 416×416 image size for faster real-time inference.
- **Custom Training Pipeline:** Configured dataset, annotations, training scripts, and detection thresholds.
- **Visualization Output:** Overlays detection boxes and class labels on input images for clear visual feedback.

Skills and Interests

Languages/Configuration: Java, Python, C++, SQL, HTML, CSS, C#

Technologies/Frameworks: YOLOv7, Unity, Bootstrap

Tools/Platforms: MySQL, Git, GitHub, AWS, Linux, Unity, Figma, Tableau

Certifications & Achievements

- **Top 5% Rank Nationwide:** NPTEL Certification Course: Human Computer Interaction (IIIT DELHI)
- **3-Month Remote Paid Internship:** Administrative Assistant at Orange Tribe (Branding & Packaging Studio, Noida)
- **Completed Microsoft DP-900:** Azure Data Fundamentals with a stellar score of 970/1000