Course: [COSC 419B/519B]

Instructor: [Dr. Mohamed Shehata]

# Jersey Number Recognition Project

## Overview

This project involves designing a robust system for Jersey Number Recognition in sports video footage. The system will analyze video tracklets of players to detect the jersey number (0-99) or return -1 if no number is visible. The project emphasizes computer vision, deep learning, and sequence-based analysis techniques.

## Goals

1. Develop an accurate recognition system.
2. Submit results to the SoccerNet Challenge 2023 - Jersey Number Recognition.
3. Provide at least some incremental improvements either in accuracy, speed, or resource efficiency.

## Deliverables

* Proposal
* Progress Journal
* GitHub Repository: Ensure all contributions are properly tracked.
* EvalAI Submission: Model performance evaluation.
* Demo & Presentation: Showcase results and live demo.
* Final Report: Detailed documentation.

## Requirements

* Recommended Stack:
* Language: Python
* Framework: PyTorch
* Version Control: GitHub (commit frequency and members contribution to the code are graded).

## Grading Breakdown

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| --- | --- |
| Component | Weight |
| Proposal | 10% |
| Progress journal | 10% |
| EvalAI Model Performance | 40% |
| Oral Presentation | 20% |
| Final Report | 20% |

## Timeline

1. Proposal Due: [Date]Proposal Due: Feb. 27
2. Progress Report Deadlines: Feb 27 and Mar 27
3. EvalAI Final Submission: Mar 27
4. Oral Presentation: Mar 27
5. Final Report: Apr 4

## Additional Resources

* SoccerNet Challenge 2023: https://eval.ai/web/challenges/challenge-page/1952/overview
* Supporting Materials Document: see Canvas