# **DS5500 Data Science Capstone**

# Automated Grading of Handwritten Assignments in Mathematics

### **Weekly Report for week commencing 18 February 2024**

Project Description:

The primary goal of this project is to leverage the latest advancements in HMER and MLP to develop a comprehensive solution for the automatic grading of handwritten math assignments at the school level. By combining these technologies, this project aims to address the challenges associated with grading handwritten math assignments and enhance the efficiency and effectiveness of math education.

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| Tasks accomplished last week |
| Completed EDA of CHROME dataset |
| Identified OffHME set for offline recognition |
| Converted .lg files into .txt label files in YOLO format |
| Split dataset into train, val and test and organized image and label files accordingly |
| Trained YOLOv5 from scratch data and tested symbol recognition |

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| Tasks to be accomplished next week |
| Improve accuracy on symbol recognition |
| Implement graph encoder model for string symbols into Latex |

Issues or changes:

No issues or changes to the project plan as of this week.