PRESENTATION OUTLINE: Parallel Processing of Handwritten Character Recognition

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November 25, 2022

1 Introduction

- Problem Definition
- Problem Description
- Proposed Approach

2 Existing System

- Conventional Models
- Its Drawbacks
- Need for Parallel Processing

3 Neural Networks

- Feed Forward Neural Network
- Implementations
- Convulational Layers
- Fully Connected Layers

4 Parallel Architecture

- GPU
- OpenMP
- Batch Processing

5 Compute Unified Device Architecture

- CUDA Architecture
- CUDA Implementation
- System Requirements

6 Dataset

- MNIST Dataset
- Pre-Processing
- Train and Test Data

7 Implentation

- Input Dataset
- Training the Model
- Matrix Multiplication

8 Result

- Character Recognition
- Batch Output
- Computing Speed
- Accuracy

9 Conclusion

- Discussion
- Future Work

10 Final Slide

- Insights
- Questions
- Suggestions
- Thank you

References