

CSYE7374 – 38227

Parallel Machine Learning and Artificial Intelligence

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Lecture 1 2020-01-06

1. Brief introduction

2. Syllabus Details

Please download the syllabus from Blackboard and pay attention to the details of this course

3. Introduction to High Performance Parallel Computing

- Overview
- Concepts and Terminology
 - Please read the attached material of *Classifications of Parallel Computers* to know **Flynn's Taxonomy**.
 - And you can read other parts of the above document to know shared memory system and classification based on grain size.
 - Google: Amdahl's Law and Scalability including strong scaling and weak scaling.
- Parallel Computer Memory Architectures
 - Shared memory
 - Distributed memory
 - Hybrid