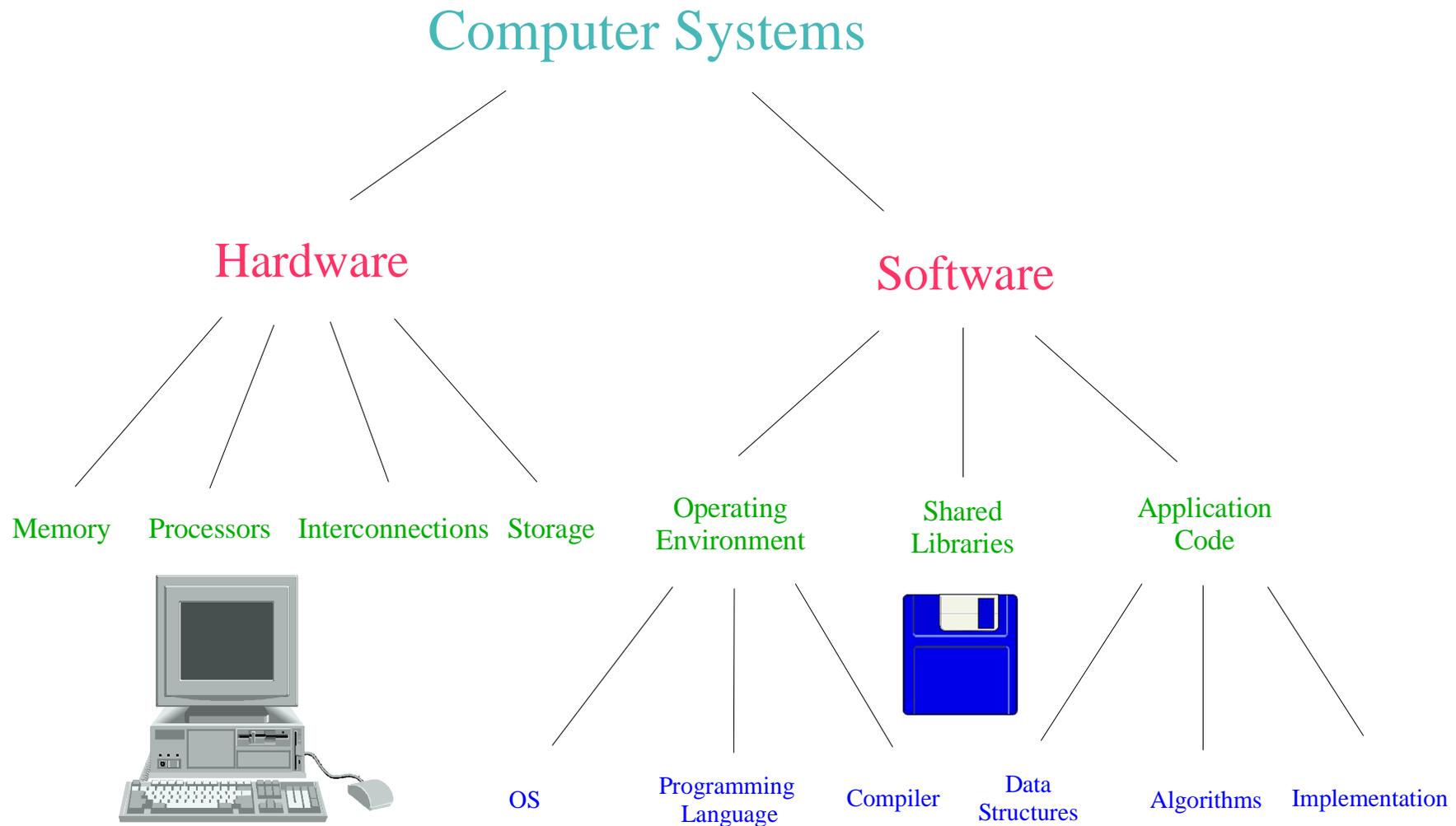


# IE 495 Lecture 5

September 12, 2000

# Course Recap

# Our View of the World



# Classifying and Modeling Architectures

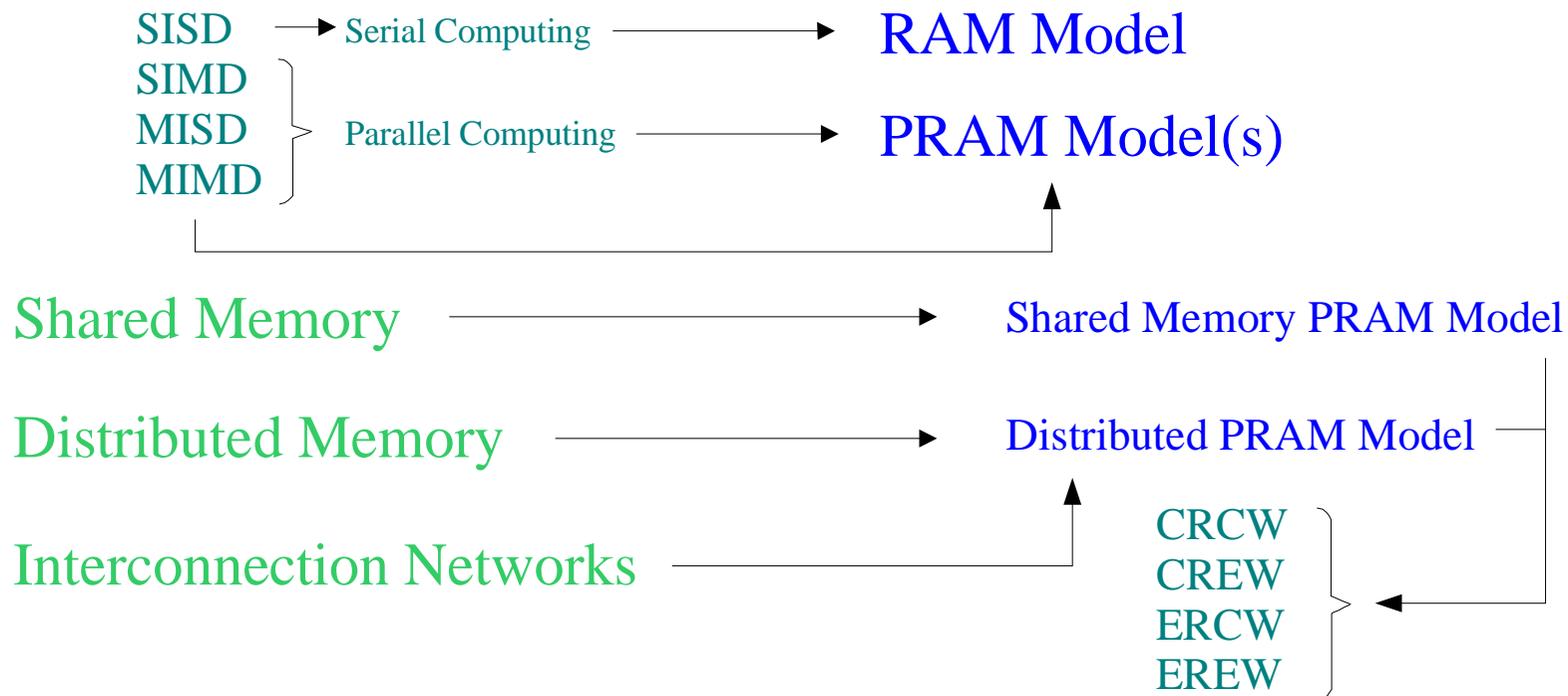
Lectures 1 and 2

Lecture 3

Classifying Architectures

Modeling Architectures

## Flynn's Taxonomy



# Analyzing Architectures and Algorithms

Lecture 2

Analyzing Architectures

Interconnection Networks

Performance Measures

Graph Properties

Degree  
Bisection Width  
Communication Diameter  
Connectivity Matrix  
Adjacency Matrix

Time to Perform Operations

Semigroup operations  
Sorting operations

Lecture 3 and 4

Analyzing Algorithms

Asymptotic Analysis

Modeling Assumptions  
Classifying Algorithms

Orders of Magnitude  
Polynomial/Exponential  
Time Complexity  
Space Complexity

Order Relations/  
Equivalence Classes

Induction and Recursion

Master Theorem