# Lecture #24: Randomly Constructed Binary Search Trees Lecture Presentation

**Review of Preparatory Material** 

### **Deterministic Quicksort**

What Does It Do?

## **Assumption about Input Arrays**

Why are Properties of "Randomly Constructed Binary Search Trees" Relevant?

#### What Can Be Established?

## A Randomized Quicksort Algorithm

What Does This Algorithm Do Instead?

Why are Properties of "Randomly Constructed Binary Search Trees" Relevant?

#### What Can Be Established?

What Can Go Wrong if Array Entries are Not Distinct?

## **Assumptions, and Their Impact**