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# ECS 122A

## Algorithm Design and Analysis

Instructor: Qirun Zhang

# Agenda

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- Quicksort
- Analysis of Quicksort

# Course updates

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- Change of office!
  - Moved to 3027 Kemper
- Homework
  - The deadline is strict.
  - No technical issues!
    - If you do have one, try to figure it out early.

# Heapsort

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```
Heapsort(A, n)
{
    BuildHeap(A);
    for (i = n downto 2)
    {
        Swap(A[1], A[i]);
        Heapify(A, 1, i-1);
    }
}
```

# Quicksort

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- Quicksort
- A randomized version of quicksort
- The worst-case analysis of quicksort
- The average-case analysis of quicksort

# The End

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