Where to Go from Here

Outline for Today

- **Where We've Been**
  - What did we cover this quarter?
- **Your Questions**
  - Questions on any topics you'd like!
- **What Comes Next**
  - What's next in theory?
- **Final Thoughts**
  - Wrapping up the experience.

Where We've Been

Where We've Been

- Hybrid RMQ
- Fischer-Heun
- B-Trees
- Red/Black Trees
- Augmented Trees
- Euler Tour Trees
- Amortization
- Binomial Heaps
- Fibonacci Heaps
- Splay Trees
- Aho-Corasick
- Suffix Trees
- Suffix Arrays
- Count(-Min) Sketches
- Cuckoo Hashing
- vEB Trees
- $\{x, y\}$-Fast Tries
- Disjoint-Set Forests
- Dynamic Graphs

Life Lessons from Data Structures

Hybrid RMQ Structures:

Teamwork

Fischer-Heun:

Sharing

B-Trees and Red/Black Trees:

Role Models

Augmented Trees:

Collaborative Problem Solving

Euler Tour Trees:

Changing Perspectives

Amortized Analysis:

Altruism

Binomial Heaps:

Adaptation

Fibonacci Heaps:

Compromise

Splay Trees:

Flexibility

Aho-Corasick Matchers:

Tenacity

Suffix Trees:

Versatility

Suffix Arrays:

Frugality

Count(-Min) Sketches:

Practice

Cuckoo Hashing:

Assertiveness

van Emde Boas Trees:

Precision

$\{x, y\}$-Fast Tries:

Diversity

Disjoint-Set Forests:

Self-Improvement

Dynamic Graphs:

Organization

There's so much more out there to learn!

Your Questions

Where to Go From Here

More Theory Classes

- CS167
  - Transition to research-level algorithms.
- CS261 / CS361B
  - Advanced algorithm techniques.
- CS262
  - Algorithms and data structures for genomics.
- CS265
  - Randomized algorithms and data structures.
- CS267
  - Algorithms and data structures for graphs.
- CS362
  - Algorithms and data structures for modern data models.

Questions to Keep Asking

Can we change our perspective?

Can we change our constraints?

Can we do better?