DISTRIBUTED

TRACING -2

NOTE ABOUT THIS WEEK'S TASK

- NOT ABOUT TRACING: INSTEAD FOCUS ON SETTING UP INFRASTRUCTURE
  ⇒ USEFUL FOR THE FUTURE: WE WILL BUIDL ON THIS/USE IT

- RISK: YOU MIGHT FIND IT DOESN'T RUN ON MACHINES YOU CAN ACCESS

  THAT IS FINE. POST A QUESTION ON CAMPUSWIRE
  ⇒ I WILL POST A LINK TO JOIN CLOUDLAB, AND INSTRUCTIONS.

APologies FOR TODAY
Distributed Tracing From The Top

- Sample at Trace Granularity

Decisions
- Sampling Procedures
  - Need Uniform
  - Reservoir

Problems/Concerns with Sampling

- Tail Behavior

![Graph showing tail behavior over time]

- Garbage Collection
- SSD Compaction
- Updates & Periodic Tasks
- ...

Desirable Tracing Behavior?

Trace the tail.
- Other Edge Cases

- Dummy Assumption For Taee Behavior

Alternates (Hindsight)
Dapper Vs Hindsight Overheads.

Ergonomics

\[ \rightarrow \text{Minimize effort needed to add tracing.} \]

Why?
How?

Alternate Approaches

- FaR / DTrace / mProbes
  PRO
  More versatile (?)

- Philosophical
  CON
  More work (?)

- Less no.

Challenges to using these approaches