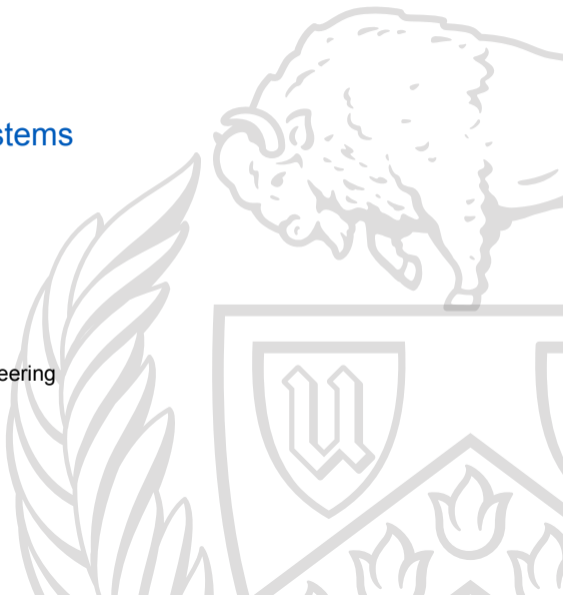


Raf™

CSE 486/586: Distributed Systems

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Kadernlia

Kadernlia has been a **huge** market success!

Profits are through the roof.

We'll **probably make payroll** this week.

Repeating Success

We believe Kadernlia is successful because:

- Bad fonts are [everywhere](#).
- It's not a real word anyway.
- Buying shoddy goods is a way of life in 2021.

We have trolled the literature to [repeat this success](#).

Introducing Raf™

Raf™ is like Raft, except:

- Not as **capable**
- Not as **reliable**
- Not **nearly as difficult to implement**

However:

- Nobody understands distributed systems anyway
- If you say **either “Raf” or “Raf TM”** fast it sounds like you said “Raft”
- Finance says we only have 3 weeks

Project Outline

Raf™ is Raft without **Configuration changes**.

(Think: Raft through Section 5 only.)

It has a few other simplifications.

The goal is to get **consensus** as simply as possible.

It is **very important** that you start this soon.

Correctness

I believe (but have not proven) that RafTM is correct.

It is **not atomic** to clients, however!

In particular, **successful commits** may not confirm.

(Failed commits **never confirm**.)

Free Code!

We will be using **UDP** for this project.

Because we have not used it before, there are **helper functions**.

There are also several **tests**.

My hope is that:

- The tests and given code are **directly helpful**
- They help you **understand the project** (and Go) better

The Raft Paper

Read the Raft paper [1]:

When?

Last week!

How carefully?

[Read it again.](#)

What part?

Through [Section 5.](#)

When, again?

A.S.A.P.!

Summary

Let's [look at the project.](#)

References I

Required Readings

- [1] Diego Ongaro and John Ousterhout. “In Search of an Understandable Consensus Algorithm”. In: *Proceedings of USENIX Annual Technical Conference*. USENIX, June 2014, pp. 305–319. URL: <https://www.usenix.org/system/files/conference/atc14/atc14-paper-ongaro.pdf>.

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