

## Understanding Software Dynamics Ch 7 Lab Report

Notes:

time align commands:

```
./timealign rpc1.log rpc2.log rpc3.log
```

```
./timealign -all rpc1.log rpc2.log rpc3.log
```

7.1) I do not understand why it is not aligned as expected. The expected 1-2ms gap between 2 RPCs is eliminated.

7.2) I do not understand why postprocessing the server log gives no result.

7.3) I do not understand why postprocessing the server log gives no result.

Concurrency overhead:

- Lock Contention: Threads waiting for shared resources (e.g., key-value store) due to lock acquisition delays.
- Context Switching: CPU switching between threads from frequent state saves/restores.
- Memory Contention: Threads competing for RAM bandwidth
- Queueing Delays: Busy threads cause operation queues
- Thread Synchronization: Coordinating threads via mutexes/signaling