PhD Supervisor Meeting

Update for: December 3, 2024 Thomas Swarbrick¹²

Itemised Breakdown

1	_	Covering Additional Content 1.1.1 365 preparation. 1.1.2 GPU/Encoding reading. 1.1.3 Mathematics.	2 2 2 2 2
2	2.1	Beuwulf Cluster 2.1.1 Ansible 2.1.2 K8s LATEX 2.2.1 Beamer 2.2.2 Report	3 3 3 3 3 3 3
3	3.1	Networking related textbooks/concepts to explore. Unsorted papers to read.	4 4 4

¹Supervised by Dr Haris Rotos & Prof Nicholas Race.

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References, Sources, & Further Reading

1 Ongoing Reading

1.1 Covering Additional Content

As part of the PhD Bi-weekly meeting I have continued to read around the subject area and learn more about the subject, I have particularly focused on the areas outlined below.

1.1.1 365 preparation.

In preparation for the 365 module next term I have undertook the following reading in the inter-rim period:

- Re-watched the 365 lecture content from last year, make new sets of notes, convert notes into Anki Flashcards, introduced into spaced repetition learning regimen.
- Worked on the coursework implementation/Ryu tutorials from last year to be confident enough to TA/Assist in the delivery of labs for the 2024/2025 academic year.
- Additional reading from recommended reading list that may be listed in the module such as:
 - Book referenced in the Moodle page.
 - Important papers that are directly related.

1.1.2 GPU/Encoding reading.

Current code is written in golang for development speed will transition to c soon.

I have began the starts of my idea by beginning to learn how to run OpenCL kernels on the graphics card on the fiona system (A40).

Implementation of the DCT2 II /DCT2 III in kl/c97 for further understanding.

1.1.3 Mathematics.

Working through additional mathematics to further my understanding of mathematics, making use of both the MIT Opencourseware Mathematics and Books on Information theory from the library.

- Re-freshers on proofs, number theory & graph theory.
- Reading of Information theory, along with encoding ideas by Thomas M. Cover et al.

2 Additional Learning

2.1 Beuwulf Cluster

I am also working on developing physical networking experience by making use of both the machines that I have accumulated in A09 and in D21.

2.1.1 Ansible

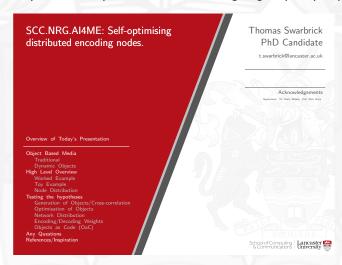
I am currently learning how to do infrastructure as code via using Ansible to learn how to perform deployments over multiple systems.

2.1.2 K8s

2.2 LATEX

2.2.1 Beamer

Wrote a Beamer theme for the delivery of presentations. WIP, does not currently contain accessibility meta-data that would be required for a presentation to a larger group of people.



.Really great for the delivery of maths or stats and inclusion of programmatic diagrams.

2.2.2 Report

This Document

For writing up Mathematics, notation and for maintaining a consistent format for documents. Will be improved to include maths theorems boxes, semi-transparent backgrounds and assertions to make document more readable than solid text.

3 Reading

- 3.1 Networking related textbooks/concepts to explore.
- 3.2 Unsorted papers to read.