

# PhD Supervisor Meeting

Update for: December 3, 2024  
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<sup>1</sup>Supervised by Dr Haris Rotos & Prof Nicholas Race.  
<sup>2</sup>This research was funded by AI4ME, a BBC prosperity partnership.

[1] John Doe. "Title". In: *Journal* (2017).

# 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 undertaken 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 $S_x$ Breakout

### 2.1 Diagrammed Work from Ed Suggestion

### 2.2 Approaches to cross-correlation

## 3 Additional Learning

### 3.1 Beuwulf Cluster

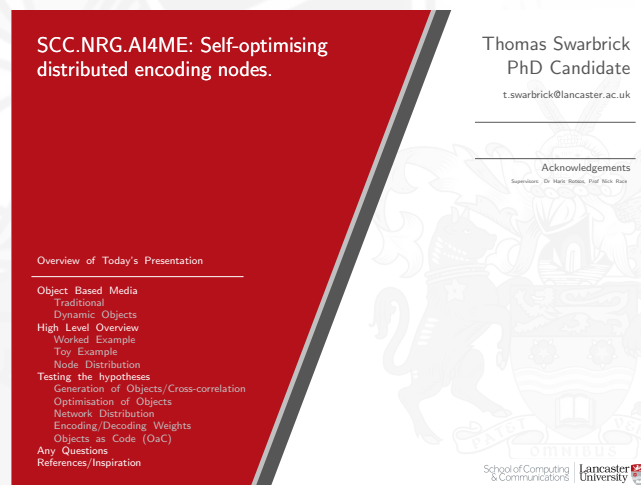
#### 3.1.1 Ansible

#### 3.1.2 K8s

### 3.2 $\text{\LaTeX}$

#### 3.2.1 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.

#### 3.2.2 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.

## **4 Reading**

**4.1 Networking related textbooks/concepts to explore.**

**4.2 Unsorted papers to read.**

