Ethernet

Part I – Wiktor Kochanek

1. 7 Layer Model
   - What is does the model represent in general and what is the physical layer specifically?
     https://www.youtube.com/watch?v=kCuyS7ihr_E&ab_channel=danscourses (most relevant after 13:20)
   - What is ethernet in the most basic sense
   - How useful and safe it is compared to Wi-Fi
     https://www.youtube.com/watch?v=YUAv2fiIr3c&ab_channel=Datheavyguy
   - History of ethernet
     https://www.youtube.com/watch?v=g5MezxMcRmk&ab_channel=GideonRoberts
     https://www.wikiwand.com/en/Ethernet#/History
     https://www.comms-express.com/blog/what-does-an-ethernet-cable-do/#:~:text=The%20most%20common%20use%20for,or%20a%20network%20to%20work.
2. Where is it used (or why is it relevant in the first place)
   - https://transmitter.ieee.org/ethernet-hyper-connected-world/
   - more sources will be added eventually, as this is the most important topic in this specific part

Part II – Gordan Konevski

Main source:

https://www.analog.com/media/en/technical-documentation/application-notes/EE-269.pdf

❖ This will be the main connection between the first and the second part. It will deal with the technicalities and components of ethernet and will introduce some example code. As such, it will go in great depths to describe the innerworkings of what makes ethernet such a relevant component of networking in general. The make-up of the topics and their chronology will be reworked and reordered as the final paper is being drafted.

Part III – Luca Brodo

Main source:
https://web.archive.org/web/20140328151014/http://www.tttech.com/fileadmin/content/general/secure/TTEthernet/TTTech-TTEthernet-Scalable_Real-Time_Ethernet_Platform-Whitepaper.pdf

1. What is TTEthernet
- No technicalities necessary, just a lay man's explanation of what it is
- From Ethernet to TTEthernet
2. TTEthernet Design Objectives
3. Four possible scenarios
   https://www.wikiwand.com/en/TTEthernet#Fault-tolerance#Description
4. Fault tolerance
   https://www.wikiwand.com/en/TTEthernet#Fault-tolerance
5. TTEthernet System Properties (The pros/cons)