**Initial Project Meeting Summary**

* Talked through initial guidance document to establish main points of the project
* Discussed report – start ASAP so its easy to update throughout the project and keep on top of it, have structure and any potential sources complete / areas of research filled in by next meeting. Report is most important part so spend lots of time and care to make it organised
* Talked about scope of the project – try to be realistic about the amount of work I can achieve/ deliver and make sure I can do ample research for the project beforehand
* Ways to make project have a sufficient AI element to it – lots of open libraries and datasets available but may be tough to find data on a specific area so research beforehand
* Potential project ideas:
* Cryptography algorithm evaluation – Difficult because the current algorithms in use are very complicated so hard to test/ pick up any fault. Hence would only really work if I used very basic algorithms. Also hard to link to AI
* Phishing detection AI – Good in principle as language recognition can learn over time to pick up on suspicious elements of an email. However it would be hard/ unethical to get access to a large enough dataset of emails to train the AI on
* Password strength analysis – Again, good in principle as it’s a good use of AI and it’s learning capabilities. Use could be unethical because a user should never put their password into any system other than the one that it is specifically for (someone could simply use the system to gain access to passwords). So would need to find a good use for such a system (maybe checking the strength of the password a user has inputted while setting up a new account?)
* Network intrusion detection with machine learning – Good idea. But hard to set up an environment in which I can read all network traffic to process and test the system. More research needed
* Given sites like CyBOK and NCSC to look into some topics further
* Discussed work needed to be done for the next meeting – Finesse ideas some more and support with research and evidence that show they’re a viable project and can be taken further