Unit 8 Reflection

This unit focused on delivering a draft research proposal for summative assessment. The journey of discovering a research topic and literature gap has been one of the most challenging, arduous, soul-destroying tasks ever. I repeatedly questioned my life's choices at this point. It was difficult because, based on feedback from the tutor, there must be a research question that drives a search for literature gaps. However, I found that every research question I manifested into existence was answered in some way by literature. This finding matches my findings by other researchers who state that one must never assume that a research topic has not already been explored. True.

The struggle was the constraints that nested within my mind, constantly tweeting: "not web pages", "not literature review", and "not based on the literature review from unit 4". My questions that chirped out in response: "Must I perform a questionnaire exercise? A survey collection? Must I write code? Draw graphs? Somehow show tables about stuff?" As I mined through the literature using google Scholar, Taylor and Francis, ScienceDirect and others, I laboured through each article that struck a chord of interest. Moreover, I found a pattern emerging from the literature of how they structure it, discuss it, search for literature etc. I found this oddly satisfying to learn. However, despite reading over 80 articles from beginning to end, a research gap still was hidden from sight. This was infuriating because I feel that identifying gaps in the literature is something *machines* and especially *artificial intelligence*, must be leveraged for. It seems so redundant that students worldwide are wasting countless hours trying to summarise literature or identify gaps. This is an automatic, repeatable algorithm; therefore, Let. The. Machines. Work!

The big issue with designing a research proposal was the lack of quality time to sit and focus on deep insight into literature gaps—employment commitments. This was the same issue encountered with doing a proper literature review. I enjoyed doing the literature review, but I think I could have done much better on it. Knowing what I now know about performing a literature review would have helped tremendously. The one takeaway from a literature review is that I feel personally enriched from learning about a topic I am interested in. So, settling on an area of research was tremendously challenging in the context of a research proposal. However, the following process was beneficial:

- 1. Focus on what you're interested in.
- 2. Select a concern that many researchers are talking about
- 3. Narrow down into an area of interest
- 4. Ask research questions

- 5. Locate literature, review the abstract, introduction and discussions or findings.
- 6. If unsatisfactory, repeat steps 1 to 6.

Using the process above, I went from the larger Edge Computing and Cloud Computing concerns to Big Data and its sources. This ultimately brought me to mobile devices and, by extension, the "hot" topic known as the Internet of Things (IoT). At first, I wanted to focus on IoT in healthcare. However, the literature showed gaps in the broader field, and there seemed to be only a single gap related to Electronic Health Records and IoT data. At first, I was elated because I had found my calling. But by Sunday, that calling ceased, and I turned my attention to a more general application of solving the pressing research issue with IoT, namely the difficulty of interoperability. So I changed the title, searched for more literature to support what I found, and drafted a proposal for summative assessment.

A cool refreshing tidal wave of relief washed over me. Soon, soon this will all be over.