



Qualcomm Problem Statement

1. About Qualcomm

Qualcomm Incorporated is an American multinational semiconductor and telecommunications equipment company that designs and markets wireless telecommunications products and services. It derives most of its revenue from chipmaking and the bulk of its profit from patent licensing businesses. The company headquarter is located in San Diego, California, United States, and has 224 worldwide locations. The parent company is Qualcomm Incorporated (Qualcomm), which has a number of wholly owned subsidiaries: Qualcomm CDMA Technologies (QCT) sells all of Qualcomm's products and services (including chipsets); Qualcomm Technology Licensing (QTL) is responsible for the patent licensing business; and Qualcomm Technologies, Inc. (QTI) operates nearly all of Qualcomm's R&D activities.

2. **Statement:** Identification of papers/websites/documents with content related to a given context or abstract

Let's take various published papers as an example. Every paper would typically have an abstract summarizing the content of the paper. When we read a paper on a particular subject, we would like to find out other related material. Normally we do a search using keywords to identify papers of our interest. However, keyword based search is limited as it



doesn't look for context and also is time consuming to build a useful search string.

The requirement is thus to build a tool (AI or otherwise) that helps one identify papers/content given a brief abstract. As an example, one could perhaps use research papers and their abstracts to help train such a tool. Once the system is trained, we should be able to give a few lines of abstract or summary of technical solution/problem (not only limited to research papers) and be able to search through a set of documents to identify relevant documents. The key goal is to understand the concept in abstract using NLP processing , consider alternative terms for words in abstract while establishing a correlation.

3. FAQs

1. Will there be Mentors to guide during the hackathon?

Yes, company officials will be there to help throughout megathon.

2. Will the training dataset be provided ?

No, you are expected to find (or synthesise) data sets from your end. Apart from using abstract/full text of research papers, other technical resources can also be used.

3. Will you provide additional computing power (external GPUs, Server access, etc)?



No you are expected to bring and work on your own computers only. No additional computing resources will be provided from our end.

4. Submission Format

- Presentation conveying your core idea
- Analysis of your idea's performance
- Code / Github repository link

5. Evaluation Criteria

Final scores would be based upon both the accuracy/speed of the results, and also the novelty of approach. Both deep learning and Pure NLP based solutions are encouraged.