

Project 1:

Tell me about Covid - A Question-Answering System about COVID

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Abstract

i Since COVID-19 took over the world at the end of 2019, abundant resources have been made available online for searching and references. Some of the resources are provided by professionals such as health workers or researchers via scientific publications, while some were pure experience sharing by the public. Given the overwhelming amount of information, a system that is able to extract information from these resources to provide timely and verified information is in high demand. This project aims to develop a system that is able to identify and rank a list of candidate answers for questions asked by the users.

1. Project Overview

Since the outbreak of COVID-19, scientists have carried out experiments and research on COVID-19. Vaccines, antibodies, oral anti-viral medicine, and cell-based treatments were among the focus areas of their research. The outcome of their research has been sought by the public as well as the governments to control the outbreak. In addition, the general public has not shied away from contributing their thoughts and experiences too. These have resulted in a large burden for the readers seeking to maintain up-to-date knowledge on COVID-19. In fact, some of the information provided is understandable by the general public. This project is hence motivated to design and implement a Question-Answering system that provides a list of recommended and ranked answers to the questions related to COVID-19.

2. Objectives

1. To identify suitable datasets for question-answering on COVID19.
2. To design an automated question answering system on COVID19 for the public use.

3. Background

Please see the Project Overview

4. Proposed Methodology

Phase 1: Literature Review on text analytics for question-answering system.

Phase 2: Acquisition and pre-processing of dataset.

Phase 3: Design of question-answering system for COVID-19 for general public

Phase 4: Implementation and Testing

The techniques for question answering can be decided after literature review.

Suggested reading: <https://ieeexplore.ieee.org/abstract/document/9484290>

5. Scope of Technology

Python for text analytics

Any tools/programming language for web application.

6. References (if any)

7. Additional Documents (if any)