

PROJECT

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TOPIC: Disease Inference From Health Related Questions using Deep Learning

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About Project: Medical care and research are the most important part of science for humans. Many of us are surfing Internet to get any disease related information but still they did not get the appropriate information they require so for them proposed system will give accurate information. Disease Inference system which will give the disease information which he/she is suffering on the basis of health related questions. Proposed system's approach is distinctly different in that we are trying to build a general predictive system. The proposed scheme includes three key components. First, collection of dataset. The second, finds the raw features and their signatures as input nodes in one layer and hidden nodes in the subsequent layer, respectively. Third, it learns the inter-relations between these two layers.

Disease inference system from health related questions is able to automatically predict the possible diseases for the given questions asked by health seeker. The inferences of various kinds of diseases are done. With the input data collected from HealthTap, 8 most common classes of diseases are considered. The collected data in the form of QA pair will be processed using Signature Mining. Dense subgraph method will extract the most relevant terms related to the diseases from this processed data. After extraction of feature, proposed system builds a deep learning architecture which has layered architecture. The deep learning model has L layers. The first layer contains the input raw features and the L layer denotes the output disease types. Hidden layers are unseen from the data. Because of the deep architectures, it repeatedly learns the more abstract patterns layer by layer. This enables the system to extract the underlying connections among medical attributes.

PUBLICATIONS

- Paper - Disease Inference System-Comparison of Different Methods
Conference - ICICT 2018
Journal - IEEE
Status - Presented