



## An Artificial Intelligence Based Recommender System to Predict Future Severity of Covid-19 Patient

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**Received:** July 27, 2020

**Published:** November 07, 2020

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Covid-19 challenged the normal life of human being across the world. It has affected all the constituent of the society like health, medicine, business, agriculture, education, transport, food and other things. Every day we have enormous amount of data about Covid-19 like Coronavirus cases by district, state and country, clinical data, virological data, patient's data and so on. Among these data, patient data is very important which consists of underlying conditions of patient and symptoms, past disease history, treatments undertaken, present health condition, patient demographic data and age group and so on. The objectives of this research are design and develop an artificial intelligence based recommendation system to do predict the future severity of patient (will become a normal case or critical case or very critical case). The obtained patient's data are analyzed and predictions about future severity of patient are provided using AI based recommendation system for physician. Recommender Systems (RSs) are software tools that are used to provide suggestions/recommendations to user according to their requirement. There are different kinds of recommender systems have been developed such as collaborative-filtering, content-based filtering, demographic filtering, hybrid filtering and knowledge based recommendation system. A knowledge based recommendation system is required that will provide predictions/recommendations for future severity of Covid-19 patient. Also, Covid-19 patient's data analysis using big data analytics will help to make import decision to make policies, guidance and recommendations for COVID-19 to its Stakeholders [1-19].

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