

Artificial Intelligence,  
Machine Learning,  
and Mental Health  
in Pandemics

*A Computational  
Approach*

Edited by

Shikha Jain

Kavita Pandey

Princi Jain

Kah Phooi Seng





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# Artificial Intelligence, Machine Learning, and Mental Health in Pandemics

*A Computational Approach*

Book • 2022

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Shikha Jain, Kavita Pandey, ... Kah Phooi Seng



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## About the book

### Description

*Artificial Intelligence, Machine Learning, and Mental Health in Pandemics: A Computational Approach* provides a comprehensive guide for public health authorities, researchers and health professionals in psychological health. The book takes a unique approach by exploring how Artificial Intelligence (AI) and Machine Learning (ML) based solutions can assist with monitoring, detection and intervention for

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## Key Features

Examines the datasets and algorithms that can be used to detect mental disorders

Covers machine learning solutions that can help determine the precautionary measures of psychological health problems

Highlights innovative AI solutions and bi-statistics computation that can strengthen day-to-day medical procedures and decision-

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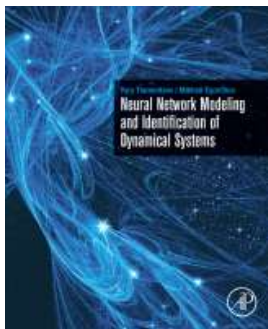
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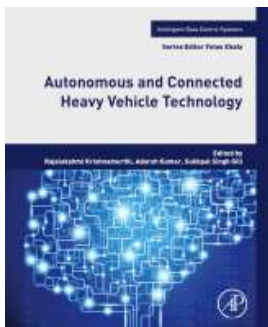


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#### Abstract

Depression is a mood disorder that includes feelings of sadness, loss, or anger. It interferes with a person's daily activities. People express frustration in various ways. Some people react on social media whereas other people react in their personal lives. People use social media to share information and chat with friends. This creates a huge amount of data each day. These data can be gathered in the form of images, videos, and text reflecting the mental status of the person. However, researchers are working to employ computational models on user-generated content to learn patterns automatically, although much small-scale research has been conducted by assuming that the unimodality of data may not bring us truthful results. This chapter explains various models of machine learning to detect depression. The models are implemented to analyze emotions using Twitter and Facebook posts.

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#### Keywords

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