

(54) Title of the invention : FAKE NEWS DEFENSIVE MODELING VIA ONLINE SOCIAL NETWORKS

(51) International classification :G06Q0050000000, G06F0016953500, H04L0051520000, G06N0007010000, G06F0016951000

(86) International Application No :NA
 Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
 Filing Date :NA

(62) Divisional to Application Number :NA
 Filing Date :NA

(71)Name of Applicant :
1)Malla Reddy Engineering College
 Address of Applicant :Malla Reddy Engineering College Dhulapally post via Kompally Maisammaguda Secunderabad -500100 Secunderabad Secunderabad -----
2)Mr. Kurapati Veeranjanya Varaprasad
 Name of Applicant : NA
 Address of Applicant : NA

(72)Name of Inventor :
1)Mr. Kurapati Veeranjanya Varaprasad
 Address of Applicant :Assistant Professor Computer Science and Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Medchal-Malkajgiri-500100. State:Telangana Email ID & Contact Number: Kurapathi.prasad@gmail.com 8919549722 Secunderabad -----
2)Ms. Prathibha Ganapuram
 Address of Applicant :Assistant Professor Computer Science and Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Medchal-Malkajgiri-500100. State:Telangana Email ID & Contact Number: 4g.prathibha@gmail.com & 7207523769 Secunderabad -----
3)Ms. Gnaneswari Bodana
 Address of Applicant :Assistant Professor Computer Science and Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Medchal-Malkajgiri-500100. State:Telangana Email ID & Contact Number: bodanagnaneswari@gmail.com 7386212496 Secunderabad -----
4)T.Anitha
 Address of Applicant :Assistant Professor Computer Science and Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Medchal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: Thota.anitha@gmail.com & 9959668398 Secunderabad -----
5)Ms. Nagma Begum
 Address of Applicant :: Assistant Professor Computer Science and Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Medchal-Malkajgiri-500100. State:Telangana Email ID & Contact Number: nagmabegum@mrec.ac.in & 9603026280 Secunderabad -----
6)Mr. Kama Srikanth
 Address of Applicant :Assistant Professor Computer Science and Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Medchal-Malkajgiri-500100. State:Telangana Email ID & Contact Number: srikanthkama09@gmail.com & 9966548998 Secunderabad -----

(57) Abstract :
 ABSTRACT Online social networks, or OSNs, have become a vital tool for interpersonal connection. They can also be used to incorporate nonhuman situations. The exponential surge in popularity of open social networks (OSNs) can be ascribed to the swift advancement of Internet technology, which might reduce the dissemination of false information or rumors that could be harmful to society in any way. This article proposes a model to study the spread of messages that are currently referred to as false news. The suggested model explains how various misinformation-disputing strategies affect how false information spreads among groups. Globally, the Susceptible-Infected-Recovered (SIR) model has been employed to gauge the transmission of COVID-19 within a population. Evidently, the infectious nature of the COVID-19 virus and other. The spread of breaking news via social media is akin to a disease. This study used SIR models with Facebook to examine the dynamics of the distribution of a particular piece of news material. Both in and out of demographics. To calculate the reproduction number, data from the news has been gathered, including the quantity of likes, comments, shares, and views, in addition to the number of Facebook account followers, twitter and whatsapp. The model is developed using a set of differential equations. Its balance and stability are also carefully examined. The fundamental reproduction number (R0), a crucial metric for the examination of message dissemination in OSNs, is discovered. Fake messages will not spread widely in the online network if R0 is less than one (R0 <1); if R0 is greater than one, rumors will continue to circulate in the OSN. There is discussion of actual patterns of disinformation spreading in OSNs. The model also addresses the mechanism that regulates the spread of untrusted messages. Extensive modeling and testing have also been used to validate the suggested paradigm.

No. of Pages : 10 No. of Claims : 4