A STUDY ON PUBLIC HEALTH SURVEILLANCE USING BIG DATA ANALYTICS

A. RONALD DONI
Faculty of Computer Science and Engineering,
Sathyabama Institute of Science and Technology,
Chennai

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Author: A. Ronald Doni

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LIST OF SYMBOLS AND ABBREVIATIONS

SYMBOLS

β_p	-	Coefficient of the lag p for model estimation
Dc	-	Dengue Cases
Dd	-	Dengue Deaths
ε	-	Error Rate
Hh	-	Humidity
α	-	Intercept
Y_{t-p}	-	Lag p of the series
A_i	-	Model A (number of infected cases)
B_d	-	Model B (number of deceased cases)
D_c	-	Number of deceased cases as on 22nd July 2020
I_c	-	Number of infected cases as on 22nd July 2020
Pi	-	Population
Rr	-	Rainfall
Tt	-	Temperature
γ	-	The rate of change of dew factor
β	-	The rate of change of humidity
α	-	The rate of change of temperature
T_p	-	Total population in the Indian subcontinent
ε	-	Training epoch of the neural network

ABBREVIATIONS

ACE2	-	Angiotensin-Converting Enzyme 2
ACO	-	Ant Colony Optimization
ADHD	-	Attention Deficit Hyperactivity Disorder
AHC	-	Acute Hemorrhagic Conjunctivitis
ANN	-	Artificial Neural Networks
BLSTM	-	Bidirectional Long Short-Term Memory
BRNN	-	Bidirectional Recurrent Neural Networks
CNN	-	Convolutional Neural Network
CNN-MDRP	-	Convolutional Neural Network based Multimodal Disease Risk Prediction
CoV	-	Coronaviruses
DKS	-	Dense k-Subgraph
EWS	-	Early Warning System
GRU	-	Gradient Recurrent Unit
LDA	-	Linear Discriminant Analysis
LSTM	-	Long Short-Term Memory
PCR	-	Polymerase Chain Reaction
PHS	-	Public Health Surveillance
PSO	-	Particle Swarm Optimization
RER	-	Renewable Energy Resources
ResNet	-	Residual Neural Network
RNN	-	Recurrent Neural Network
SVM	-	Support Vector Machine
UIDAI	-	Unique Identification Authority of India
WHO	-	World Health Organization