

1135-68-3158

Yinshu Wu* (yinshu.wu@aamu.edu), Yinshu Wu, madison, AL 35758. *The SIR Modeling for the Biological Flu using Artificial Neural Network.*

The biological flu is a disease spread by contact with infected individuals. Victims recover from the disease and gain further immunity from it. In the paper, the population is separated into different groups using the SIR model. Differential equations involve the susceptible, infected, and recovered groups. The model will use the past ten years biological information to estimate the groups of population for the next year by Artificial Neural Network. Machine learning is the general method for artificial neural networks which is based on the concept of self-adjustment of internal control parameters. (Received September 26, 2017)