

Prediksi Pola Penyebaran Penyakit Demam Berdarah *Dengue* (DBD) Menggunakan Algoritma *Evolving Artificial Neural Network* (EANN)

Hasna Diniya¹, Fhira Nhita², Danang Triantoro Murdiansyah³

^{1,2,3}Fakultas Informatika, Universitas Telkom, Bandung

¹hasnadiniya@students.telkomuniversity.ac.id, ²fhiranhita@telkomuniversity.ac.id,

³danangtri@telkomuniversity.ac.id

Abstract

Dengue Hemorrhagic Fever is one of the diseases that need special attention, because the number of sufferers continues to increase in every year. This is recorded by the Ministry of Health of the Republic of Indonesia. Cimahi is one of the area that has a high rate of infection. This virus outbreak continues to occur due to various factors, such as the environment, people's lifestyle, and climate. The climate is temperature, humidity, rainfall, and wind. With that condition, it is necessary to predict the pattern of the spread of Dengue Hemorrhagic Fever (DHF) in the area. In this study the prediction of the distribution pattern with weather parameters using the Evolving Artificial Neural Network (EANN). The algorithm obtain a prediction for *Incident Rate* (IR) for Januari 2018 is 0,1224 and MSE 0,1627. The result of the two weather's scenario's experiment, it doesn't have so much different. It means, there is another factors that influence the occurrence of this disease, one of which is people's lifestyle.

Keywords: DBD, Prediction, ANN, GA, Climate
