Artwork/Project Title

Insurance Classification Using Artificial Neural Network

Year Accomplished

2023

Role/Position

Data Scientist

Publication Link

https://github.com/belindamuti

Artwork/Project Description

This project was part of my Deep Learning course's mid-semester exam. The task was to implement classification using an Artificial Neural Network (ANN). To begin, I conducted data exploration, data cleaning, data preparation, and developed a baseline model. Later, I was given the task to improve the model's accuracy by making modifications through my model. The key task was to develop the best model based on the data problem, which required comprehensive data analysis. Finally, my efforts resulted in a perfect score of 100 from my lecture.

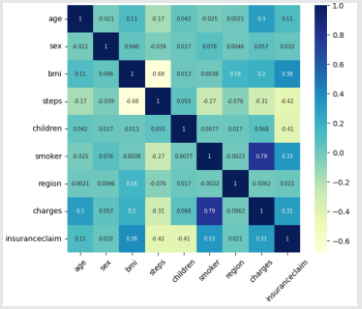

Figure 1 Corelation Matrix

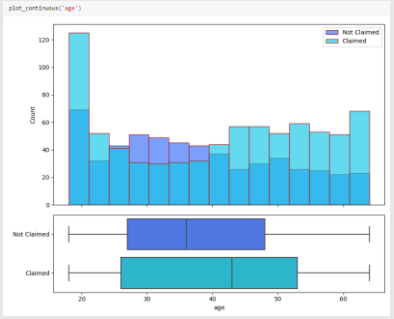

Figure 2 Distribution & Outlier

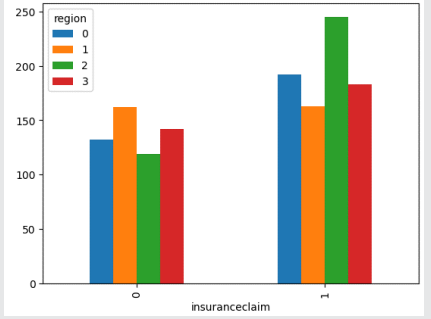

Figure 3 Multivariate Analysis

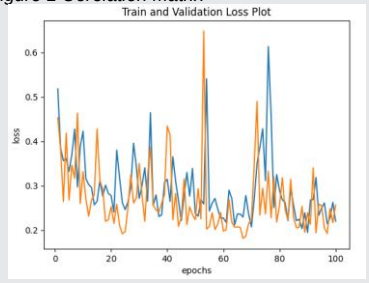

Figure 4 Training & Validation: Baseline

Classification Report:

	precision	recall	f1-score	support
0	0.76	0.92	0.83	52
1	0.94	0.82	0.88	82
accuracy			0.86	134
macro avg	0.85	0.87	0.86	134
weighted avg	0.87	0.86	0.86	134

Figure 5 Classification Report: Baseline

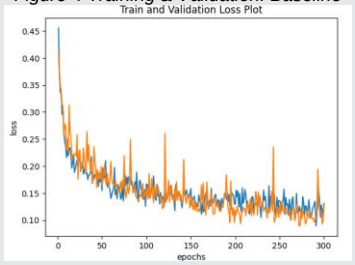

Figure 6 Training & Validation: Modification

Classification Report:

	precision	recall	f1-score	support
0	0.87	0.92	0.90	52
1	0.95	0.91	0.93	82
accuracy			0.92	134
macro avg	0.91	0.92	0.91	134
weighted avg	0.92	0.92	0.92	134

Figure 7 Classification Report: Modification

Belinda Mutiara

BINUS Students 5th Semester

belinda.mutiara@binus.ac.id

phone: 0812 8308 7870
line: belinda.mutiara
linkedin: www.linkedin.com/in/belinda-mutiara