The development of discriminant analysis model aims to evaluate the physical condition of hockey athletes. Discriminant analysis model is applied later in Delphi Programming Language to facilitate the physical condition evaluation of Surabaya’s hockey athletes. In order to get a model of discriminant analysis which can be changed into a mathematical function to distinguish the physical condition of athletes who are good and less, the data processing of physical condition evaluation of Surabaya’s hockey athletes is performed with the aid of computer programs statistic.

In this research, there are two categories in selecting, the Non-Hockey and Hockey. The result of Discriminant analysis can classify the ability of the group until 97.8%, in other word it means that it can be used to classify the physical condition of athletes hockey Surabaya.

Thus, to facilitate the application of discriminant analysis model in evaluating the physical condition of athletes, a computer program which compatible and suit with the needs is required. This condition leads to the development of EKFA-HOKI program which use Delphi Programming Language, so that the coach can use it to evaluate the physical condition of athletes.

By simply entering the data in the column of physical conditions that is provided and following by pressing the analysis button, the information of the physical condition of athletes will appear. Based on the results of the panels that have been conducted, it illustrated that the coaches give a good appreciation of the program EKFA-HOKI.

Thus EKFA-hockey program is able to evaluate the physical condition of Surabaya’s hockey athlete and coaches can provide the support to improve the performance of hockey athletes in Surabaya. The researcher expects that EKFA-HOKI program can be use properly and develop other programs in sports other than hockey.

Keywords : Analysis discriminant, Delphi, evaluate the physical condition of hockey athletes