



PROJECT REPORT
THE ANALYSIS OF BASKETBALL ATHLETES'
POSITIONS BASED ON BODY HEIGHT USING THE
DBSCAN ALGORITHM
YUSTINUS DELVIN PERMANA
17.K1.0015

Faculty of Computer Science
Soegijapranata Catholic University
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APPROVAL AND RATIFICATION PAGE



Judul Tugas Akhir : THE ANALYSIS OF BASKETBALL ATHLETES'
POSITIONS BASED ON HEIGHT USING THE
DBSCAN ALGORITHM

Diajukan oleh : Yustinus Delvin Permana

NIM : 17.K1.0015

Tanggal disetujui : 14 Januari 2022

Telah setuju oleh

Pembimbing : Rosita Herawati S.T., M.I.T.

Penguji 1 : Rosita Herawati S.T., M.I.T.

Penguji 2 : Hironimus Leong S.Kom., M.Kom.

Penguji 3 : R. Setiawan Aji Nugroho S.T., MCompIT., Ph.D

Penguji 4 : Yonathan Purbo Santosa S.Kom., M.Sc

Penguji 5 : Y.b. Dwi Setianto S.T., M.Cs.

Penguji 6 : Yulianto Tejo Putranto S.T., M.T.

Ketua Program Studi : Rosita Herawati S.T., M.I.T.

Dekan : Dr. Bernardinus Harnadi S.T., M.T.

Halaman ini merupakan halaman yang sah dan dapat diverifikasi melalui alamat di bawah ini.

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I, the undersigned:

Name : YUSTINUS DELVIN PERMANA

ID : 17.K1.0015

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Yustinus Delvin Permana

17.K1.0015

ABSTRACT

Basketball is one of the most popular sports in the world. Basketball requires a proportional height and the right position to play more optimally. Therefore, a study entitled analysis of basketball athletes' position based on height was made using the DBSCAN algorithm.

In this study, the DBSCAN algorithm was used to find out which players' heights were optimal in terms of points, rebounds, assists and then grouped players' positions based on their height and tasks. In determining the DBSCAN parameters, namely epsilon and minimum points, this research will use the elbow method, and then the silhouette score and then The data to be retrieved is from Kaggle's Website.

The DBSCAN parameters in the form of epsilon and minimum points in this study were determined using the elbow method and silhouette which turned out to be unsatisfactory results from the elbow method due to data problems. Comparing the silhouette score with epsilon is an alternative to the elbow method that has been tried and the result is an epsilon of 2.54 while the other parameter, namely the minimum points used is 4 because in processing the data in this study, it is divided into 3 times, each of which has a data dimension of 2. The final result can be obtained well if not using the theory elbow method even though the performance is reduced but the results can be read well.

Keyword: DBSCAN, Silhouette, Basketball

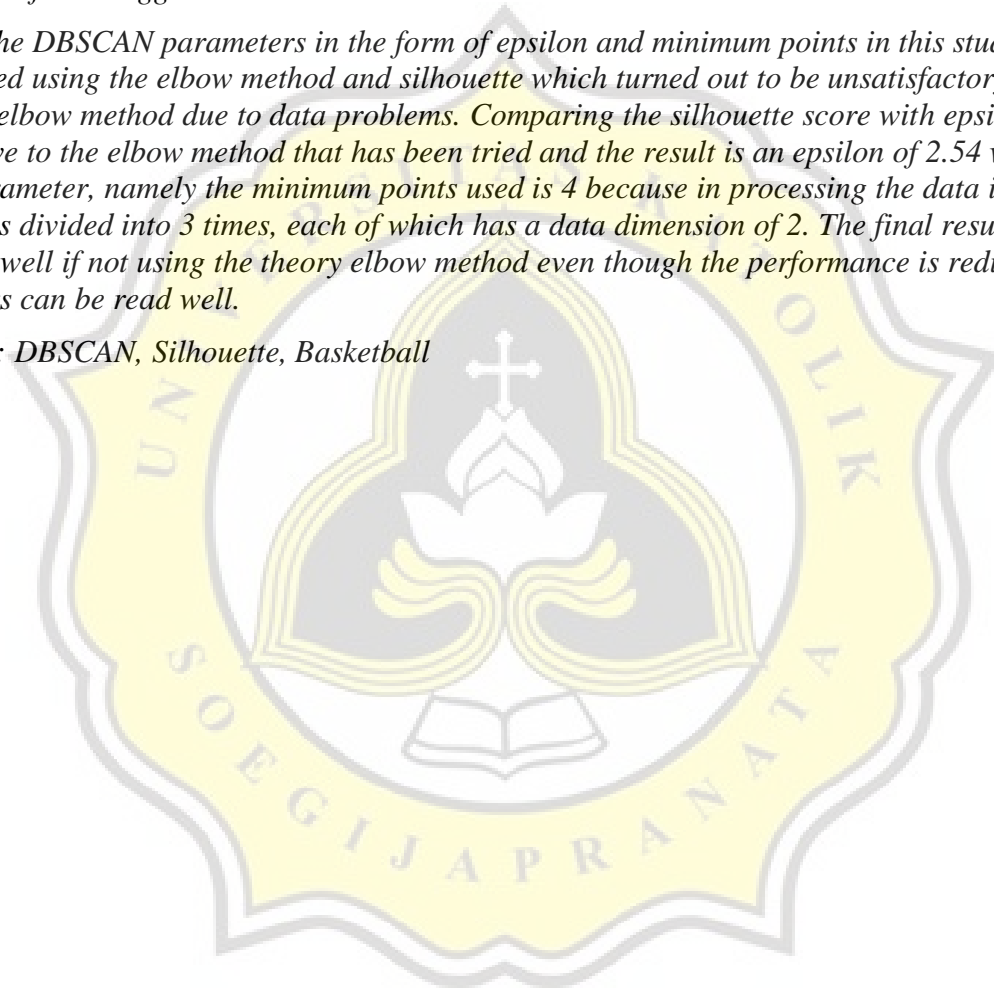
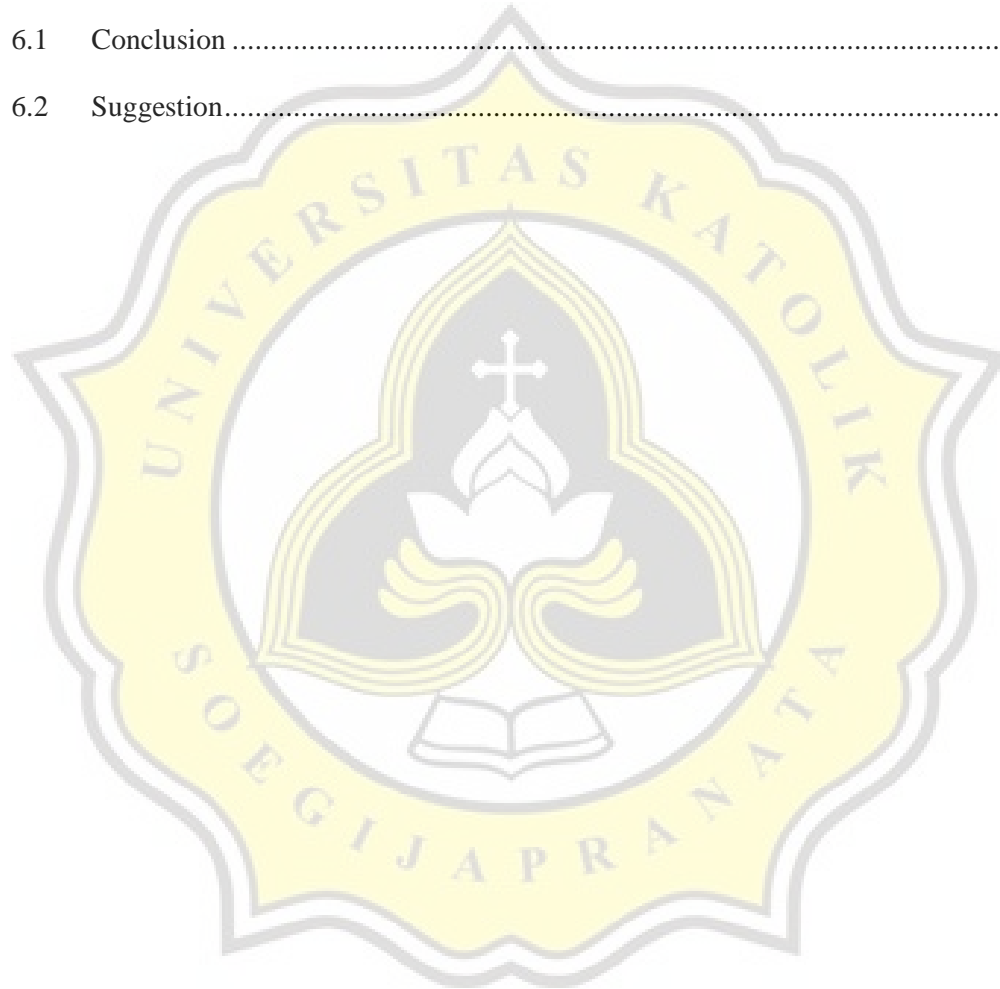


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