ABSTRAK

Perkembangan pesat dalam industri *game* di Indonesia sejalan dengan kemajuan yang terjadi dalam dunia *game online* saat ini dengan peminat *esports* mencapai 71,5 juta peminat di seluruh dunia pada tahun 2013. *Mobile Legends* merupakan salah satu *game* (*online Multiplayer Battle Arena*) MOBA di *handphone* yang mirip dengan *DOTA 2* di game PC. Mobile legends memiliki jumlah unduhan yang begitu besar, sehingga tingkat persaingan pada *game mobile legends* juga semakin tinggi. Para pemain sering menghadapi masalah saat bermain *mobile legends*, baik secara solo maupun tim. Kekalahan dalam permainan sering kali disebabkan oleh kesalahan dalam memilih *hero* (*drafting*). Penelitian ini bertujuan untuk mengetahui tingkat akurasi prediksi kemenangan tim berdasarkan pemilihan *hero* pada pertandingan M5 *World Championship* 2023 menggunakan metode *Artificial Neural Network*. Data variabel mencakup *Durability, Offense, Ability Effects, Difficulty* dan *Win Rate*. Hasil prediksi kemenangan tim berdasarkan pemilihan hero pada game mobile legends menggunakan metode artificial neural network dengan 40 *epocs* memiliki tingkat *loss* 52% sedangkan tingkat *accuracy* 76%. Sehingga dapat disimpulkan performa metode *artificial neural network* cukup baik dalam memprediksi kemenangan tim berdasarkan pemilihan *hero* pada *game mobile legends*. Dari hasil penelitian, diharapkan dapat membantu pemain *mobile legends* dalam *drafting hero* dengan baik.

Kata Kunci: Mobile Legends, Prediksi, Artificial Neural Network, Pemilihan Hero

ABSTRACT

The rapid development in the gaming industry in Indonesia is in line with the progress occurring in the world of online gaming today with esports enthusiasts reaching 71.5 million enthusiasts worldwide in 2013. Mobile Legends is one of the MOBA (online Multiplayer Battle Arena) games on mobile phones that similar to DOTA 2 in PC games. Mobile legends has a very large number of downloads, so the level of competition in the mobile legends game is also getting higher. Players often face problems when playing Mobile Legends, both solo and in teams. Defeat in the game is often caused by mistakes in choosing a hero (drafting). This research aims to determine the level of accuracy of team victory predictions based on hero selection in the 2023 M5 World Championship match using the Artificial Neural Network method. Variable data includes Durability, Offense, Ability Effects, Difficulty and Win Rate. The prediction results for the team's victory based on hero selection in the mobile legends game using the artificial neural network method with 40 epocs have a loss rate of 52% while the accuracy rate is 76%. So it can be concluded that the performance of the artificial neural network method is quite good in predicting team victory based on hero selection in the Mobile Legends game. From the research results, it is hoped that it can help mobile legends players in drafting heroes well.

Keywords: Mobile Legends, Prediction, Artificial Neural Network, Hero Selection