ABSTRACK

Penelitian ini membuat Sistem Pendukung Keputusan untuk rekomendasi penalti insiden balap di kompetisi Indonesia Sim Racing League dengan menerapkan metode Decision Tree C4.5. Data historis insiden diperoleh langsung dari Indonesia Sim Racing League Season 1 sampai Season 3 dan ditambahkan juga dataset dummy berdasarkan atribut yang telah ditentukan untuk membantu proses optimalisasi dari sistem pendukung keputusan ini, dan semuanya diproses menggunakan Python di Google Collab untuk pelatihan metode Decision Tree C4.5. Hasil Sistem Pendukung Keputusan divisualisasikan dalam bentuk gambar dengan tingkat akurasi 75%. Temuan ini menunjukan bahwa Sistem Pendukung Keputusan dapat membantu Steward dalam mengambil keputusan di tahap awal, hal tersebut terjadi karena Sistem pengambil keputusan telah mempersempit ruang atribut serta dapat meminimalisir sikap subyektif dari Steward sehingga keputusan yang dikeluarkan oleh Steward akan lebih adil dan profesional

Kata Kunci :   Sistem Pendukung Keputusan, Decision Tree C4.5, Insiden Balap F1, Indonesia Sim Racing League.

ABSTRACT

This study creates a Decision Support System for penalty recommendations for racing incidents in the Indonesia Sim Racing League competition by applying the Decision Tree C4.5 method. Historical incident data was obtained directly from the Indonesia Sim Racing League Season 1 to Season 3 and also added a dummy dataset based on predetermined attributes to help the optimization process of this decision support system, and all were processed using Python on Google Collab for training the Decision Tree C4.5 method. The results of the Decision Support System are visualized in the form of images with an accuracy level of 75%. This finding shows that the Decision Support System can assist Stewards in making decisions at an early stage, this happens because the decision-making system has narrowed the attribute space and can minimize the subjective attitude of the Stewards so that the decisions issued by the Stewards will be fairer and more professional.

Keywords :   Decision Support System, Decision Tree C4.5, F1 Racing Incident, Indonesia Sim Racing League.