

## Attribute Selection and Verification for Effective Hockey Player Ranking in Sri Lankan Context

HAYB Hettiarachchi<sup>1#</sup>, SMM Lakmali<sup>1</sup>, and RMM Pradeep<sup>2</sup>

<sup>1</sup>Department of Computational Mathematics, Faculty of Computing, General Sir John Kotelawala Defence University, Sri Lanka

<sup>2</sup>Department of Information Technology, Faculty of Computing, General Sir John Kotelawala Defence University, Sri Lanka

<sup>#</sup>38-dba-0007@kdu.ac.lk

Sri Lanka's hockey domain has been hindered by the lack of a standardized dataset and the absence of a well-defined set of attributes for player performance assessment, limiting the application of advanced AI technologies. This study aims to identify and verify a key set of attributes specific to Sri Lankan hockey players. The methodology involved three phases: First, an extensive literature review of 30 research papers was conducted to identify a preliminary list of 10 attributes. Second, these attributes were calibrated through face-to-face interviews with coaching experts, involving 25 national-level hockey players, resulting in the refinement to 8 attributes. Finally, these attributes were verified through a structured questionnaire survey conducted with hockey coaching experts, leading to the finalization of 9 key attributes: Front Goals, Penalty Strokes, Penalty Corners, Green Cards, Yellow Cards, Red Cards, Card Issue Time, Goal Time, and Skill Accuracy. The next phase of this study will focus on developing a mathematical rating equation with weighted attributes to calculate performance scores for each player.

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