

The Web

Its Utilisation, Evaluation
and Security

Media Anugerah Ayu



IIUM PRESS
INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

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Editor

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IIUM Press

Published by:
IIUM Press

International Islamic University Malaysia

First Edition, 2011
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Perpustakaan Negara Malaysia

Cataloguing-in-Publication Data

Bibliography p.
Includes Index
ISBN

ISBN: 978-967-418-112-3

Member of Majlis Penerbitan Ilmiah Malaysia – MAPIM
(Malaysian Scholarly Publishing Council)

Printed by :
IIUM PRINTING SDN. BHD.
No. 1, Jalan Industri Batu Caves 1/3
Taman Perindustrian Batu Caves
Batu Caves Centre Point
68100 Batu Caves
Selangor Darul Ehsan

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ABSTRACT

This chapter presents a sport scene tracking system for badminton using video input where a single player's performance can be analyzed. A player's performance is being tracked in terms of distance, speed and acceleration during a specific event. A color filtering method is applied to filter the video and differentiate between moving and non moving objects. The coordinates from the first frame till the last frame are tracked and applied to get the distance coverage, speed and acceleration of the player. Analysis and comparison of videos between two world champion badminton players were made as a test case. Overall, this study provides a proof of concept that movement of player can be tracked by computer vision and it is even better than analyzing it manually by human eyes.

14.1 INTRODUCTION

Badminton is one of the major sports in the Asia region. China, Indonesia and Malaysia have produced several top world class players. In Malaysia, intensive training and programs are being made for the professional badminton players. It is also important to invest in coaching and training of young talents as preparation for the second and third liners of the country players. This concern has been discussed by various sports relevant