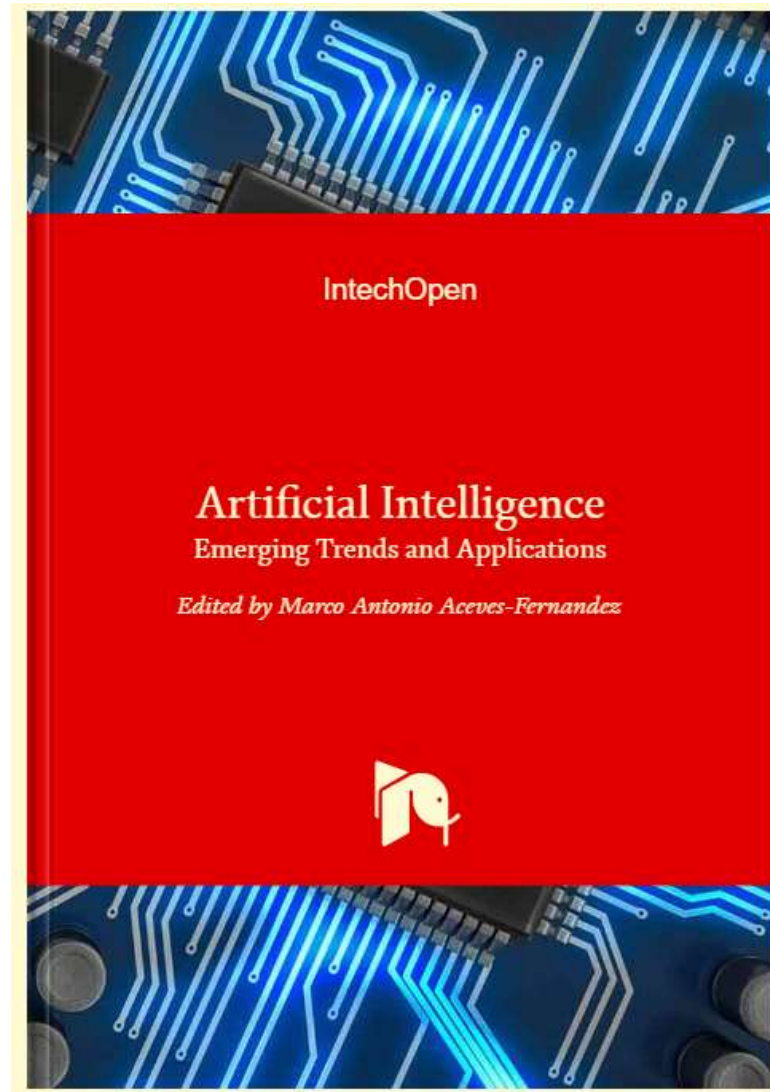


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INTRODUCCIÓN

Artificial Intelligence

Emerging Trends and Applications



Edited by Marco Antonio Aceves-Fernandez

Artificial intelligence (AI) is taking an increasingly important role in our society. From cars, smartphones, airplanes, consumer applications, and even medical equipment, the impact of AI is changing the world around us. The ability of machines to demonstrate advanced cognitive skills in taking decisions, learn and perceive the environment, predict certain behavior, and process written or spoken languages, among other skills, makes this discipline of paramount importance in today's world. Although AI is changing the world for the better in many applications, it also comes with its challenges. This book encompasses many applications as well as new techniques, challenges, and opportunities in this fascinating area.

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79

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288

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537

By Dov Schafer and David Kaufman

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91

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68

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86

By Yasir Hassan Ali

Open access peer-reviewed

15. Normal Versus Abnormal ECG Classification by the Aid of Deep Learning **85**

By Linpeng Jin and Jun Dong

Open access peer-reviewed

16. A Quantitative Approach for Web Usability Using Eye Tracking Data **67**

By López-Orozco and Florencia-Juárez

Open access peer-reviewed

17. Deep Learning Models for Predicting Phenotypic Traits and Diseases from Omics Data **90**

By Md. Mohaiminul Islam, Yang Wang and Pingzhao Hu

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18. Can Reinforcement Learning Be Applied to Surgery? **83**

By Masakazu Sato, Kaori Koga, Tomoyuki Fujii and Yutaka Osuga

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19. Application of AI in Modeling of Real System in Chemistry

76

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20. Application of AI in Chemical Engineering

89

By Zeinab Hajjar, Shokoufe Tayyebi and Mohammad Hosein Eghbal Ahmadi

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21. Application of Biomedical Text Mining

78

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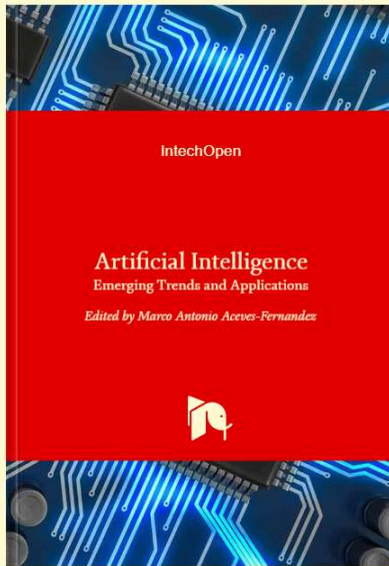
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Abstract

This chapter presents a relatively new approach to show how a web usability classical paradigm can benefit from quantitative data of a nonclassical approach. In the pilot stage, we used experimental eye tracking data acquired from 11 participants faced to a web page to perform three simple tasks. Results show advantages by using eye tracking data to identify and verify some usability problems of such a web page. In this chapter, some hints are presented for people interested in measuring web usability by using such an approach. However, a deeper study should be carried out in order to generalize our results toward the construction of a methodology to be followed by a web developer or interested people in such a field of research.

Keywords

eye tracking

web usability

human-computer interaction

quantitative approach

nonclassical approach

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1. [Introduction](#)

2. [Eye tracking technology](#)

3. [Related work](#)

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Sections

- Chapter and author info
- 1. Introduction
- 2. Eye tracking technology
- 3. Related work
- 4. Experimental approach
- 5. Data analysis
- 6. Conclusions
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A Quantitative Approach for Web Usability Using Eye Tracking Data

López-Orozco and Florencia-Juárez

Additional information is available at the end of the chapter

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Abstract

This chapter presents a relatively new approach to show how a web usability classical paradigm can benefit from quantitative data of a nonclassical approach. In the pilot stage, we used experimental eye tracking data acquired from 11 participants faced to a web page to perform three simple tasks. Results show advantages by using eye tracking data to identify and verify some usability problems of such a web page. In this chapter, some hints are presented for people interested in measuring web usability by using such an approach. However, a deeper study should be carried out in order to generalize our results toward the construction of a methodology to be followed by a web developer or interested people in such a field of research.

Keywords: eye tracking, web usability, human-computer interaction, quantitative approach, nonclassical approach

1. Introduction

Nowadays, usability is one of the key factors in the success or failure of a web project. Usability is considered a quality attribute that evaluates the accessibility, readability, navigability and ease of learning of a website or application by the user [1]. Moreover, people do not wish to learn how to use a website, and there is no manual to use a web page when a person does not find the information or products they are looking for within a website. Users should have the ability to understand how a website works immediately after viewing the website. If someone gets lost while browsing a website or has difficulty in reading the information, he or she simply tries not to use that site anymore [2].
