

INSTITUTO TECNOLÓGICO DE TIJUANA

Doctorado En Ciencias En Computación



**User Modeling For Interactive Evolutionary
Web-Based Applications Using Web Browsers And
Mobile Devices**

THESIS

FOR THE DEGREE OF

DOCTOR IN COMPUTER SCIENCE

Presents:

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COMING SOON 20xx!

Escribir dedicatorias.

Hoja en blanco para sustituirla por la aprobación de impresión de la tesis.

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Abstract

Escribir Abstrac.

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Capítulo 1

Introduction

It is a reality that the World Wide Web in recent years, is growing exponentially, which means the presence of millions of users on Web sites, Web applications, Web systems, etc. []. There is a wide variety of Web systems, where we have different users interacting with them. These users have different goals when using these Web systems. For example do a search in Google [] of particular topic, make a reservation for a room in a luxury resort, check your bank account or simply view your status on your Facebook account []. This variation of users represents a complex diversity as individuals []. This diversity lies in different skills, interests, preferences and ways of thinking, learning and knowledge []. For this reason users need different ways to interact with the information presented by the great variety of Web systems that exist.

When we intend to customize any element in Web system, we need to know the user's personal information. This information is a collection of needs, characteristics, feelings, tastes, etc. This information is required to be able to form the representation of knowledge about users. This is what is known as user modeling (UM).

A user modeling can be as simple as a profile systems where is basic knowledge of users.

Also can be as complex as represent its characteristics, needs, interests, ways to feel. In order to understand specific users. The main goal of user modeling is to represent aspects of the real world of the user's in autonomous automatically way.

In this document we present a user modeling in the context of Web-based interactive evolutionary computation.

Interactive evolutionary computation (IEC) is a branch of evolutionary computation where users become a part of the evolutionary process by replacing the fitness function; evaluating individuals of a population based on their personal preferences[13]. These evaluations are subjective according to the user point of view based on their perceptions, interests and desires.

Normally such systems require users to evaluate large amounts of individuals iteratively, causing them to lose interest for participate by fatigue that is generated[13]. Nowadays some of these systems are migrating to Web technologies looking for volunteers users to collaborate in the evaluations for distribute the load and lower the fatigue. Having Web- based interactive evolutionary systems open the possibility for linked to social platforms in order to involve the largest number possible of users to assist in the evaluation of individuals produced by these systems applications.

1.1. State of the art

Escribir el estado del arte de donde base para el proyecto.

1.2. Protocol

1.2.1. Problem

Escribir el planteamiento del problema

1.2.2. Justification

Justificar el trabajo.

Related Work

Escribir trabajo relacionado

1.2.3. Hypothesis

Escribir la hipotesis del trabajo.

1.2.4. Objectives

General Objective

Escribir el objetivo de este trabajo

Specific Objectives

Escribir los objetivos especificos

1. 1.

2. 2.

3. 3.

4. n.

1.2.5. Goals

Escribir las metas del proyecto.

1. 1.

2. 2.

3. 3.

4. n.

1.3. As this document is organized.

Escribir como esta organizado el documento.

Capítulo 2

Theoretical Framework

Escribir el marco teorico del proyecto.

2.0.1. Subsection

Escribir subsecciones.

Capítulo 3

Methodology

Escribir metodología.

3.1. Study Case

3.1.1. Study Case Description

Capítulo 4

Results Analysis

Escribir el analisi de los resultados

4.1. Preliminary Results

4.2. Another section

Capítulo 5

Proposed Model

Escribir nues modelo propuesto

5.1. Another section

Subsection

Capítulo 6

Conclusions and Future Work

6.1. Conclusions

6.2. Future Work

Apéndice A

Annex I: Something

Apéndice B

Annex II: Something

Apéndice C

Annex III: Something

Apéndice D

Annex N: Something