**LITERATURE REVIEW**

1. **INTRODUCTION**

Disability impacts negatively on human life. Each disability presents their specific barriers. These latter cause scarcity of people with disabilities from appropriate services that facilitate their specific tasks using interactive systems as they find difficulties in communicating with the user interfaces of digital applications (web, mobile, desktop, tv, etc). Different solutions were proposed, but they still insufficient and not efficient considering the pervasive environment and the bunch of contextual information that contains. Otherwise, Artificial Intelligence (AI) is an emergent imitator technology to represent the human brain thinks by the integration of the machine’s from computing systems. Computational power and speed with human perception and intelligence . AI is in growing and possesses the necessary tools that could help users with disability experience in accessing information In fact, users with disability have to use interactive systems as well-bodied users. But, they are unable to do it, because user interfaces of interactive systems are not adapted to their capabilities. Therefore, we need to improve adaptive interactive systems in order to make them accessible to disabled users. Accessibility of User Interfaces(UI)s is also an emergent and important domain that needs more and more investment . The solutions given are insufficient, superficial and limited to elementary disability. Therefore, to overcome all difficulties and challenges, we need to propose solutions that cover almost of users with disability from different cultural environments, considering almost of platforms used for the interaction. This paper consolidates research findings in collaboration between accessibility, user interfaces and artificial intelligence. In the end, we present a solution integrating accessibility, user interface and artificial intelligence. The transformative impact of artificial intelligence on our society will have far reaching economic, legal, political and regulatory implications that we need to be discussing and preparing for. Determining who is at fault if an autonomous vehicle hurts a pedestrian or how to manage a global autonomous arms race are just a couple of examples of the challenges to be faced.

1. **J.J. DUDLEY, AND P.O.KRISTENSSON, A REVIEW OF USER INTERFACE DESIGN FOR INTERACTIVE MACHINE LEARNING, ACMTRANS. INTERACT. INTELL. SYST. 1, 1, 2018**

**2.1 MERITS:**

* Make task goals and constraints explicit.
* Support user understanding of model uncertainty and confidence.
* Capture intent rather than input.

**2.2 DEMERITS:**

* Users can be imprecise and inconsistent.
* There is typically a degree of uncertainty in the relation between user input and user intent.

1. **GUANGLIANG LI, RANDY GOMEZ, KEISUKE NAKAMURA, BO HE, HUMANCENTERED REINFORCEMENT LEARNING: A SURVEY, IEEE TRANSACTIONS ON HUMAN -MACHINE SYSTEMS, VOL. 49, NO.4, AUGUST 2019**

**3.1 MERITS:**

* It is used to send the data packets securely from source to destination,without any interruption.

**3.2 DEMERITS:**

* Cryptography is not enough to defend against adversaries and insiders, careful

protocol design is needed.

1. **N. MEZHOUDI, USER INTERFACE ADAPTATION BASED ON USER FEEDBACK AND MACHINE LEARNING, PP 25-28, 2013.**

**4.1 MERITS:**

* It is used to send the data packets securely from source to destination,without any interruption.

**4.2 DEMERITS:**

* Cryptography is not enough to defend against adversaries and insiders,careful protocol design is needed to protect the user information.

1. **T. LAVIE AND J. MEYER, BENEFITS AND COSTS OF ADAPTIVE USER INTERFACES, INTERNATIONAL JOURNAL OF HUMAN-COMPUTER STUDIES VOL 68,PP 508-524, 2010**

**5.1 MERITS:**

* Four different levels of adaptivity (ranging from manual to fully adaptive with intermediate levels) routine (familiar) and non-routine (unfamiliar) situations; and different user age groups.

**5.2 DEMERITS:**

* we may find one application's interface clogged with controls that hamper the user from using it properly or another's interface designed without taking care of universal usability.

1. **N.INDURKHYA, F.J. DAMERAU, HANDBOOK OF NATURAL LANGUAGE PROCESSING, CHAPMAN AND HALL/CRC; 2 EDITION, 2010**

**6.1 MERITS:**

* It is used to send the data packets securely from source to destination,without any interruption.

**6.2 DEMERITS:**

* Although logistic regression and naive Bayes share the same conditional class probability model, a major advantage of the logistic regression method is that it does not make any assumption on how x is generated.

1. **Y.BENDALY HLAOUI AND L. ZOUHAIER AND L.JEMNI BEN AYED,MODEL DRIVEN APPROACH FOR ADAPTING USER INTERFACES TO THE CONTEXT OF ACCESSIBILITY: CASE OF VISUALLY IMPAIRED USERS, JOURNAL ON MULTIMODAL USER INTERFACES, 2018.**

**7.1 MERITS:**

* This paper presents a generic approach for the adaptation of UIs to the accessibility context based on meta-model transformations.

**7.2 DEMERITS:**

* Infact, the adaptation process has to be automatic and dynamic to free the users with disabilities from the UI change control.