



## AVIS DE SOUTENANCE DE THESE

*Le Doyen de la Faculté des Sciences Dhar El Mahraz –Fès – annonce que*

**M<sup>r</sup> : ABDELMOUMNI Ouadie**

*Soutiendra : le 30/11/2022 à 15H*

*Lieu : CED – AMPHIE 2*

*Une thèse intitulée :*

“ Mise en œuvre d’une plateforme BigData pour l’administration d’une base de connaissance avec fond cartographique représentant l’ensemble du patrimoine culturel constituant la « mémoire d’une ville ».”

*En vue d’obtenir le Doctorat*

**FD** : Sciences et Technologies de l’Information et de Communication (STIC)

**Spécialité** : Informatique

**Devant le jury composé comme suit :**

	<b>Nom et prénom</b>	<b>Grade</b>	<b>Etablissement</b>
<b>Président</b>	Pr. Tairi Hamid	PES	Faculté des Sciences Dhar El Mahraz - Fès
<b>Directeur de thèse</b>	Pr. Chenfour Noureddine	PES	Faculté des Sciences Dhar El Mahraz - Fès
<b>Rapporteurs</b>	Pr. Roukhe Ahmed	PES	Faculté des Sciences - Meknès
	Pr. LAHMER Mohammed	PH	EST - Meknès
	Pr Benslimane Mohamed	PES	EST - Fès
<b>Membres</b>	Pr. Lamrini Mohammed	PES	Faculté des Sciences Dhar El Mahraz - Fès
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## **IMPLEMENTATION OF A BIGDATA PLATFORM FOR THE ADMINISTRATION OF A KNOWLEDGE BASE WITH MAPPING BACKGROUND REPRESENTING THE ENTIRE CULTURAL HERITAGE CONSTITUTING THE "MEMORY OF A CITY".**

### **Abstract :**

In recent years, the technological leap that the world has experienced has transformed everyone's life, bringing digitalization to almost every level. This digitization particularly affects cultural heritage. Preserving cultural heritage over time was very complicated. Wars, natural disasters or human neglect have played a major role in the deterioration of cultural heritage, and sometimes even to its complete oblivion. Due to this deterioration, many people and organizations have mobilized for the preservation of cultural heritage. Except that classical preservation was very hard and difficult to maintain, which has prompted several organizations to digitize heritage, by creating platforms allowing the inventory and consultation of cultural heritage, whether tangible or intangible. Web applications offer increased visibility of content and improve the contextualization of information produced by museums or research institutions. Due to the growing popularity of these platforms, several data models have emerged (CDOC CRM, CDWA LITE, MUSUEMDAT) to be able to catalog and describe properly cultural heritage. These models aim to provide interoperability between different specialized systems, integrated access to information and integration of information which are becoming a growing demand to support research, administration and preservation of cultural heritage. Our work goes in the direction of the creation of an intelligent data model which will serve as a conceptual basis for the creation of a platform for the digitalization of cultural heritage. This platform is obviously itself based on a carefully designed architecture by choosing the appropriate technologies responding to the various problems encountered.

### **Key Words :**

culturel heritage, intelligent data model, metadata, software architectures, big data, nosql, mongodb, distributed treatments.