Enhanced Services to Improve the Usability of Digital Libraries THETOOL

OVERVIEW

Academic content has almost entirely been digitized. As a result, there is an ever-increasing need to manage this vast quantity of electronic data. Digital libraries provide a means to access a vast amount of electronic data, however, their lack of sufficient user-centred features makes finding relevant information difficult. There is a growing demand for enhanced services that allow researchers to perform their tasks more efficiently. Users want access to organised resources and a more streamlined research process. Additionally, users want visual-based interfaces and a more enjoyable experience.

INVESTIGATIONS

Our two ideas were:

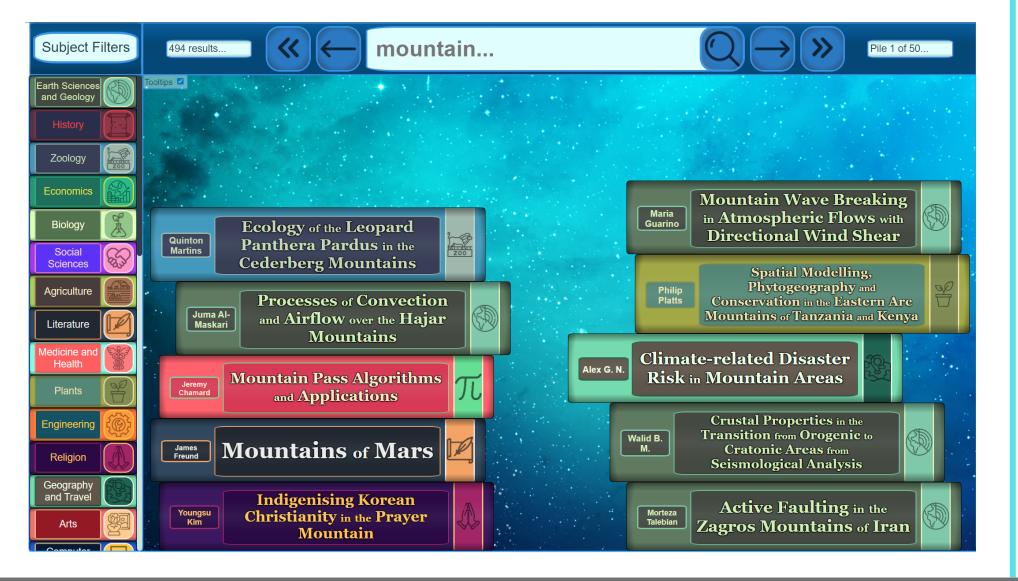
- Public and private reading lists may provide efficient access to resources and streamline the work process.
- A visualisation of search results may provide a useful visual-based interface and a better user experience.

VISUALISATION

• Organisation based on genre.

USER ORGANISED RESOURCES

- Organise resources with reading lists.
- Search results visualised as colourful books.
- Colour and icons based on book genre.
- Quick and easy visual based genre filtering system.
- Entertaining animations and visual effects.



- Private reading lists that are only visible to the user.
- Public lists can then be viewed by all system users.
- Organise research into categories and provide a recommendation feature for the digital library.

esearch Workbench			Welcome, hugh!
			Menu 🝷
Reading Lists			
Lists +		Neural networks	
Read Later 11 items A Private		Memory in neural networks and glasses Heerema, Michiel. January 1900	
Computer Science 7 items	×	A neural computer Somers, Harriet January 1995	×
Private	~	Fuzzy spiking neural networks Glackin, Cornelius	
Neural networks	×	January 2009 Self-organising neural networks /	
Public	~	Flanagan, John Adrian. January 1994	
Digital Libraries 7 items Public	×	Dynamic neural network-based feedback linearization of electrohydraulic suspension systems Dangor, Muhammed	
	~	11 September 2014 Unsupervised Semantic Segmentation through Cross-Instance Representation Similarity Bishop, Griffin R. 13 May 2020	

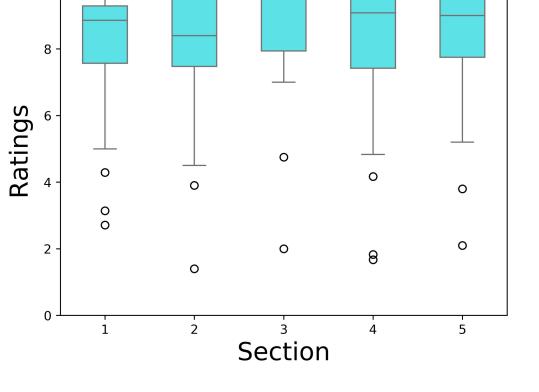
EVALUATION

We conducted a survey to evaluate our systems. Thirty UCT students were asked to rate our systems out of 10 for different sections: Usefulness(1), Ease of Use(2), Ease of Learning(3) and Satisfaction(4). We then found the average rating of the sections (5).



publications by genre was useful.The visualisation

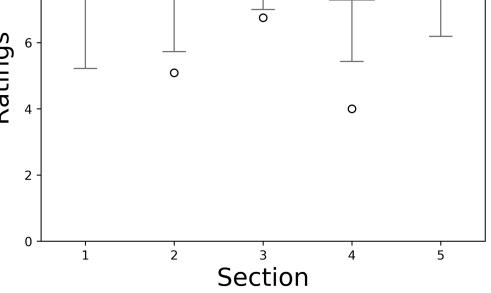
The visualisation provided a great user experience and was more useful than a text based interface.



provide a useful
 recommendation
 feature to help users
 find relevant content.
 Private reading lists
 provide an efficient

method of organising

research.





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