

### **GREC 2023**

# **Tentative program**

DATE: Thursday 24th August

#### Location:

GREC 2023 will be held at the Adobe World Headquarters 345 Park Avenue, San Jose, California, USA



## Morning

9:00-	Opening session
9:10	General Chair : Jean-Christophe Burie
9:10-	Keynote Talk
10:30	Chair : Jean-Christophe Burie
	Professor Richard Zanibbi
	Rochester Institute of Technology
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	Title : Math Formula Recognition and Search in MathDeck
	<u>Abstract</u> : MathDeck is a new prototype for searching PDF documents using both math formulas and text (https://demo.mathdeck.org). The first version of the prototype indexes research papers on Natural Language Processing in the ACL Anthology (https://aclanthology.org). In this talk, we will discuss the design of MathDeck, focusing on modules that recognize, index, and search math formulas whether they are in 'born digital' vector graphics representations (i.e., character and line drawing instructions) or in raster images. We will also talk more broadly about the role of graphics recognition in Mathematical Information Retrieval, and research opportunities including multi-modal search engines that link documents, slides, audio, and videos through their graphics and text.
	This work has been supported by the National Science Foundation (USA) and the Alfred P. Sloan Foundation.
10:30-	Coffee-break
11:00	
11:00-	Session 1 : Symbol Recognition
12:30	Chair: Bart Lamiroy
	(11:00-11:15) Segmentation-Free Alignment of Arbitrary Symbol Transcripts to
	Images Pau Torras, Mohamed Ali Souibgui, Jialuo Chen, Sanket Biswas, Alicia Fornes
	(11:15-11:30) Can Pre-trained Language Models help in Understanding Handwritten Symbols?  Adarsh Tiwari, Sanket Biswas, Josep Llados
	(11:30-11:45) <b>Text Extraction for Handwritten Circuit Diagram Images</b> <i>Johannes Bayer</i>
	(11:45-12:00) Optical Music Recognition: Recent Advances, Current Challenges, and Future Directions
	Jorge Calvo-Zaragoza, Juan Carlos Martinez-Sevilla, Carlos Penarrubia, Antonio Ríos-Vila
	(12:00-12:30) Panel Discussion
12 :30-	Lunch
13 :30	

## Afternoon

13:30-	Session 2 : Comic Analysis
14:40	Chair: Rafael Lins
	(13:30-13:45) KangaiSet: A dataset for visual emotion recognition on mangas
	Ruddy Théodose, Jean-Christophe Burie
	(13:45-14:00) Automatic Detection of Comic Characters: An Analysis of Model
	Robustness Across Domains
	Javier Lucas Aura, Antonio Javier Gallego, Jorge Calvo-Zaragoza
	(14:00-14:15) Detection of buried complex text. Case of Onomatopoeia in comics
	books
	John Benson LOUIS, Jean-Christophe Burie
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44.40	(14:15-14:40) Panel Discussion
14:40 -	General Discussion: What is the future of pure research in graphics recognition?
15:10	Chair: Jean-Christophe Burie
15:10-	Coffee Break
15:40 15:40-	Session 3 : Graphics
15:40- 17:10	Chair: Josep Llados
17.10	(15:40-15:55) Reconstruction of Power Lines from Point Clouds
	Alexander Gribov, Khalid Duri
	Alexander Grisov, Khana Bari
	(15:55-16:10) A Survey and Approach to Chart Classification
	Anurag Dhote, Mohammed Javed, David Doermann
	(16:10-16:25) FPNet: Deep Attention Network for Automated Floor Plan Analysis
	Abhinav Upadhyay, Alpana Dubey, Suma Mani Kuriakose
	(16:25-16:40) MuraNet: Multi-task Floor Plan Recognition With Relation
	Attention
	Lingxiao Huang, Jung-Hsuan Wu, Chiching Wei, Wilson Li
	(16:40-17:10) Panel Discussion
17:10-	Conclusion and Closing
17:25	General Chair: Jean-Christophe Burie