

# OPENING

#### 9<sup>th</sup> edition of International Workshop on Camera Based Document Image Analysis & Recognition (CBDAR 2021)

https://cbdar2021.univ-lr.fr

https://twitter.com/cbdar workshop













#### **CBDAR 2021 Organizers**

- Muhammad Muzzamil Luqman (L3i, La Rochelle, France)



- Sheraz Ahmed (DFKI, Kaiserslautern, Germany)















#### **CBDAR 2021 Previous Editions**

8<sup>th</sup> edition, Sydney/Australia (2019)

7<sup>th</sup> edition, Kyoto/Japan (2017)

6<sup>th</sup> edition, Nancy/France (2015)

5<sup>th</sup> edition, Washington DC/USA (2013)

4<sup>th</sup> edition, Beijing/China (2011)

3<sup>rd</sup> edition, Barcelona/Spain (2009)

2<sup>nd</sup> edition, Curitiba/Brazil (2007)

1<sup>st</sup> edition, Seoul/Korea (2005)













#### **CBDAR 2021 Sponsors**



- For sponsoring a cash award for the best paper of CBDAR 2021
- For sponsoring top-5 papers of CBDAR 2021 for an ongoing special issue of MDPI Journal of Imaging



- European Regional Development Fund Program "Interreg Atlantic Area Program in the framework of the CircularSeas Project" for supporting the successful organization of CBDAR 2021













#### **CBDAR 2021 Statistics**

- 8 submissions
- authors in 4 different countries (Brazil, India, Japan, USA)
- 3 review reports for each paper
- 6 papers accepted for oral presentation













#### **CBDAR 2021 Program Committee**

- Anna Zhu, Wuhan University of Technology China
- Cheng-Lin Liu, Chinese Academy of Sciences China
- C.V. Jawahar, IIIT India
- Dimosthenis Karatzas, Computer Vision Centre, Universitat Autonoma de Barcelona Spain
- Faisal Shafait, National University of Science and Technology Pakistan
- Joseph Chazalon, EPITA Research & Development Lab. France
- Kenny Davila, Universidad Tecnológica Centroamericana Honduras
- Masakazu Iwamura, Osaka Prefecture University Japan
- Muhammad Imran Malik, National University of Science and Technology Pakistan
- Nibal Nayef, MyScript France
- Petra Gomez-Krämer, L3i, La Rochelle University France
- Umapada Pal, Indian Statistical Institute, Kolkata India













Topics of Interest include (but are not limited to):

- → Camera based acquisition of written information
- → Restoration of camera captured documents (dewarping, deblurring, etc.)
- → Camera-based document analysis and recognition
- → Document image quality assessment / estimation
- → Image degradation models for camera captured characters/documents
- → Text extraction from scene images
- → Text in video
- → Document image retrieval
- → Device constrained techniques and algorithms
- → Performance evaluation and metrics
- → Mobile OCR
- → Smartphone-based document scanning applications
- → Feature extraction in camera capture situations















## **CBDAR 2021 Technical Program**

MONDAY, 06 SEPTEMBER 2021	IN THE HYBRID ROOM BC01
14h00-14h10	Opening
14h10-14h50	Keynote talk by Professor Koichi Kise (Osaka Prefecture University, Japan) (more details)
14h50-15h30	Oral session 1  Session chair: Nibal Nayef (MyScript – France)  • Denzel Farmer, Owen Eicher, Nishatul Majid and Yiyan Li. Handwritten Chess Scoresheet Recognition Using a Convolutional BiLSTM Network  • Naoto Morita, Ryunosuke Inoue, Masashi Yamada, Takatoshi Naka, Atsuko Kanematsu, Shinya Miyazaki and Junichi Hasegawa. Inscription Segmentation using Synthetic Inscription Images for Text Detection at Stone Monuments
15h30 - 16h00	Group photo  Coffee break (on the terrasse (4th floor) of the BC building and is included in the registration fee)

16h00 - 17h20	<ul> <li>Oral session 2</li> <li>Session Chair: Joseph Chazalon (EPITA Research &amp; Development Lab. – France)</li> <li>Sanjana Gunna, Rohit Saluja and C.V. Jawahar. Transfer Learning for Scene Text Recognition in Indian Languages</li> <li>Aline Geovanna Soares, Byron Leite Dantas Bezerra and Estanislau Baptista Lima. How Far Deep Learning Systems for Text Detection and Recognition in Natural Scenes are Affected by Occlusion?</li> <li>Shivam Sood, Rohit Saluja, Ganesh Ramakrishnan and Parag Chaudhuri. CATALIST: CAmera TrAnsformations for multi-Lingual Scene Text recognition</li> <li>Karina O. M. Bogdan, Guilherme A. S. Megeto, Rovilson Leal, Gustavo Souza, Augusto C. Valente and Lucas Kirsten. DDocE: Deep Document Enhancement with Multi-Scale Feature Aggregation and Pixel-Wise Adjustments</li> </ul>
17h20 - 17h30	Best paper award ceremony Closing













#### **CBDAR 2021 Best Paper Award**

- Cash award sponsored by MDPI
- Based on quality and originality of work and quality of presentation















## Special Issue MDPI Journal of Imaging

- Top-n papers will be invited (free of cost) to submit extended version of papers for an ongoing special issue of MDPI Journal of Imaging titled "Mobile Camera-Based Image and Video Processing"

#### **Guest Editors:**

- Dr. Petra Gomez-Krämer (La Rochelle University, France)
- Dr. Joseph Chazalon (EPITA Research and Development Laboratory, France)
- Dr. Muhammad Muzzamil Luqman (La Rochelle University, France)













# **CBDAR 2021 Group Photo**

15h30

Before going for coffee break















#### **CBDAR 2021**

# We wish you a fruitful workshop













#### **CBDAR 2021 Keynote talk**



Beyond Camera-Based Document Analysis and Recognition: Towards Camera-Based Human Document Interactions

by Professor Koichi Kise (Osaka Prefecture University, Japan)
<a href="http://imlab.jp/~kise/index\_e.html">http://imlab.jp/~kise/index\_e.html</a>





















# 9<sup>th</sup> edition of International Workshop on Camera Based Document Image Analysis & Recognition (CBDAR 2021)

https://cbdar2021.univ-lr.fr

https://twitter.com/cbdar\_workshop

