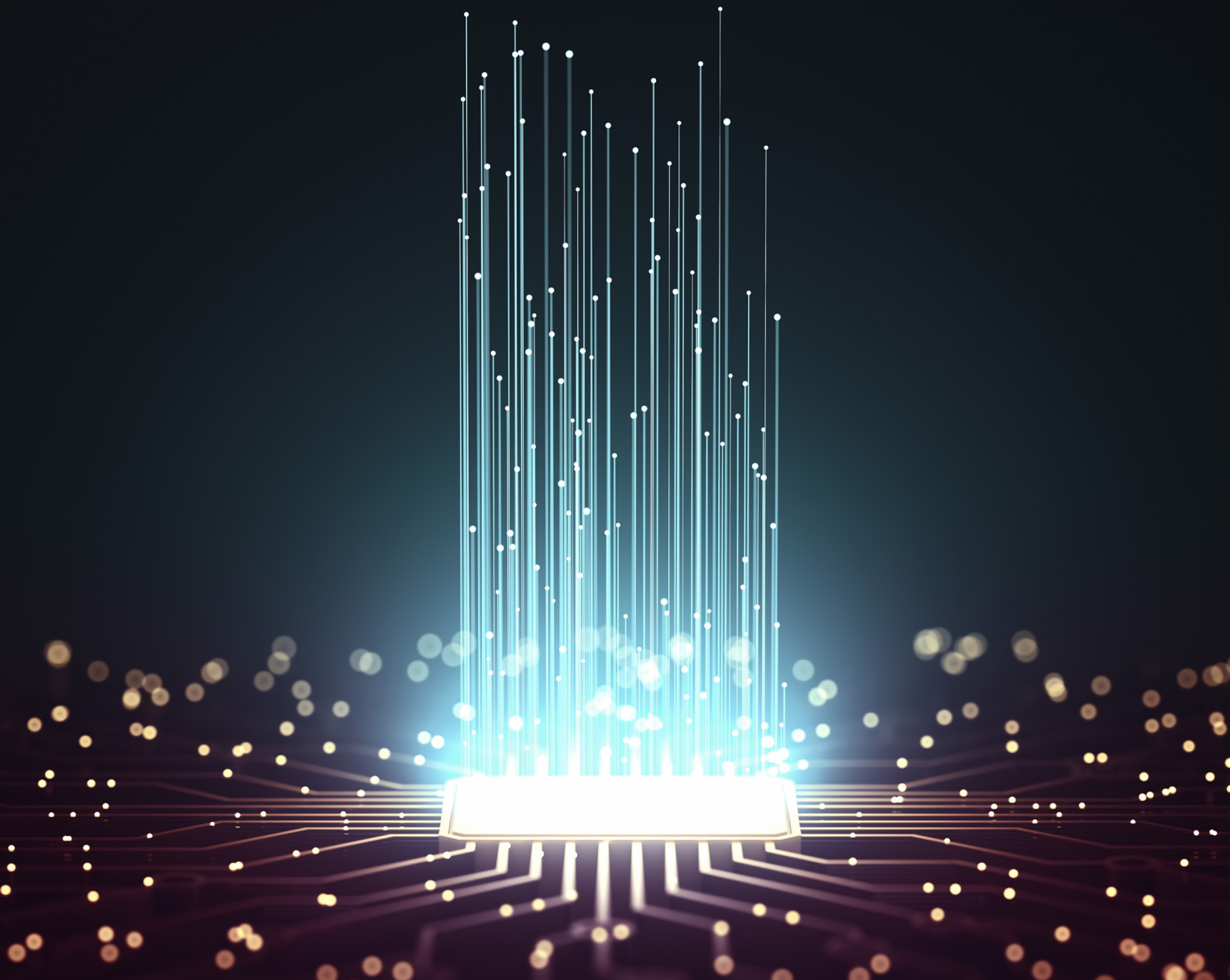
International Conference on Document Analysis & Recognition

San Jose, California, USA



Message from the General Chairs

We are delighted to welcome you all to ICDAR 2023, the 17th IAPR International Conference on Document Analysis and Recognition, at San Jose, in the heart of Silicon Valley in the United States. With the worst of the pandemic behind us, we hoped that ICDAR 2023 would be a fully in-person event. However, challenges such as difficulties in obtaining visas have also necessitated the partial use of hybrid technologies for ICDAR 2023. The oral papers being presented remotely will be synchronous to ensure that conference attendees interact live with the presenters and the limited hybridization will result in an enjoyable conference with fruitful interactions.

ICDAR 2023 is the 17th edition of a long-standing conference series sponsored by the International Association of Pattern Recognition (IAPR). It is the premier international event for scientists and practitioners in document analysis and recognition. This field continues to play an important role in transitioning to digital documents. The IAPR-TC 10/11 technical committees endorse the conference. The very first ICDAR was held in St Malo, France in 1991, followed by Tsukuba, Japan ('93), Montreal, Canada ('95), Ulm, Germany ('97), Bangalore, India ('99), Seattle, USA ('01), Edinburgh, UK ('03), Seoul, South Korea ('05), Curitiba, Brazil ('07), Barcelona, Spain ('09), Beijing, China ('11), Washington DC, USA ('13), Nancy, France ('15), Kyoto, Japan ('17), Sydney, Australia ('19) and Lausanne, Switzerland ('21).

Keeping with its tradition from past years, ICDAR 2023 features a three-day main conference, including several competitions to challenge the field and a post-conference slate of workshops, tutorials, and a doctoral consortium. The conference is being held at the San Jose Marriott from August 21-23, 2023, and the post-conference tracks at Adobe World Headquarters in San Jose from August 24-26, 2023.

We thank our executive co-chairs, Venu Govindaraju and Tong Sun, for their support and valuable advice in organizing the conference. We are particularly grateful to Tong for her efforts in facilitating the organization of the post-conference in Adobe Headquarters and for Adobe's generous sponsorship.The highlights of the conference include keynote talks by distinguished speakers Marti Hearst, Professor and Interim Dean of the UC Berkeley School of Information; Vlad Morariu, Senior Research Scientist at Adobe Research, and Seiichi Uchida, Distinguished Professor and Senior Vice President, Kyushu University, Japan.

A total of 316 papers were submitted to the main conference (plus 33 papers to the ICDAR-IJDAR journal track), with 53 papers accepted for oral presentation (plus 13 IJDAR track papers) and 101 for poster presentation. We would like to express our deepest gratitude to our Program Committee Chairs, featuring three distinguished researchers from academia, Gernot A. Fink, Koichi Kise, and Richard Zanibbi, and one from industry, Rajiv Jain, who have done a phenomenal job in overseeing a comprehensive reviewing process and who have worked tirelessly to put together a very thoughtful and interesting technical program for the main conference. We are also very grateful to the members of the Program Committee for their high-quality peer reviews. Thank you to our competition chairs, Kenny Davila, Chris Tensmeyer, and Dimosthenis Karatzas, for overseeing the competitions.

The post-conference features 8 excellent workshops, four value-filled tutorials, and the doctoral consortium. We would like to thank Mickael Coustaty and Alicia Fornes, the workshop chairs; Elisa Barney-Smith and Laurence Likforman-Sulem, the tutorial chairs; and Jean-Christophe Burie and Andreas Fischer, the doctoral consortium chairs; for their efforts in putting together a wonderful post-conference program.

We would like to thank and acknowledge the hard work put in by our Publication Chairs, Anurag Bhardwaj, and Utkarsh Porwal, who have worked diligently to compile the camera-ready versions of all the papers and organize the conference proceedings with Springer. Many thanks are also due to our sponsorship, awards, industry, posters, and publicity chairs for their support of the conference.

The organization of this conference was only possible with the tireless behind-the-scenes contributions of our webmaster and tech wizard, Edward Sobczak, and our secretariat, ably managed by Carol Doermann. We convey our heartfelt appreciation for their efforts.

Finally, we would like to thank the support of our many financial sponsors and you, the conference attendees and authors, for helping make this conference a success. We sincerely wish you an enjoyable conference, a wonderful stay in San Jose, and fruitful academic exchanges with your colleagues.

David Doermann
Srirangaraj (Ranga) Setlur

General Chairs, ICDAR 2023
San Jose, CA, USA

Foreword from the PC Chairs

Welcome to the proceedings of the 17th International Conference on Document Analysis and Recognition (ICDAR) 2023. ICDAR is the premier international event for scientists and practitioners involved in document analysis and recognition.

This year, we received 316 conference paper submissions with authors from 42 different countries. In order to create a high-quality scientific program for the conference, we recruited 211 regular and 38 senior program committee (PC) members. Regular PC members provided a total of 913 reviews for the submitted papers (an average of 2.89 per paper). Senior PC members who oversaw the review phase for typically 8 submissions took care of consolidating reviews and suggested paper decisions in their meta-reviews. Based on the information provided in both the reviews and the prepared meta-reviews we PC Chairs then selected 155 submissions (49.1%) for inclusion into the scientific program of ICDAR 2023. From the accepted papers, 55 were selected for oral presentation, and 100 for poster presentation.

In addition to the papers submitted directly to ICDAR 2023, we continued the tradition of teaming up with the International Journal of Document Analysis and Recognition (IJDAR) and organized a special journal track. The journal track submissions underwent the same rigorous review process as regular IJDAR submissions. The ICDAR PC Chairs served as Guest Editors and oversaw the review process. From the 33 manuscripts submitted to the journal track, 13 were accepted and were published in a Special Issue of IJDAR entitled "Advanced Topics of Document Analysis and Recognition." In addition, all papers accepted in the journal track were included as oral presentations in the conference program.

A very prominent topic represented in both the submissions from the journal track as well as in the direct submissions to ICDAR 2023 was handwriting recognition. Therefore, we organized a Special Track on Frontiers in Handwriting Recognition. This also served to keep alive the tradition of the International Conference on Frontiers in Handwriting Recognition (ICFHR) that the TC-11 community decided to no longer organize as an independent conference during ICFHR 2022 held in Hyderabad, India. The handwriting track included oral sessions covering handwriting recognition for historical documents, synthesis of handwritten documents, as well as a subsection of one of the poster sessions. Additional presentation tracks at ICDAR 2023 featured Graphics Recognition, Natural Language Processing for Documents (D-NLP), Applications (including for medical, legal, and business documents), additional Document Analysis and Recognition topics (DAR), and a session highlighting featured competitions that were run for ICDAR 2023 (Competitions). Two poster presentation sessions were held at ICDAR 2023.

As ICDAR 2023 was held with in-person attendance, all papers were presented by their authors during the conference. Exceptions were only made for authors that could not attend the conference for unavoidable reasons. Such oral presentations were then provided by synchronous video presentations. Posters of authors that could not attend were presented by recorded teaser videos, in addition to the physical posters.

Three keynote talks were given by Marti Hearst (UC Berkeley), Vlad Morariu (Adobe Research), and Seichi Uchida (Kyushu University). We thank them for the valuable insights and inspiration that their talks provided for participants.

Finally, we would like to thank everyone that contributed to the preparation of the scientific program of ICDAR 2023, namely the authors of the scientific papers submitted to the journal track and directly to the conference, reviewers for journal-track papers, and both our regular and senior PC members. We also thank Ed Sobczak for helping with the conference web pages, and the ICDAR 2023 Publications Chairs Anurag Bharadwaj and Utkarsh Porwal, who oversaw the creation of this proceedings.

Gernot A. Fink Rajiv Jain
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Keynote Speakers

Marti Hearst, Berkeley

Monday, August 21st, 2023 – 1:30-2:30pm

A First Look at LLMs Applied to Scientific Documents

Dr. Marti Hearst is a Professor and Head of School at UC Berkeley in the School of Information and the Computer Science Division. Her research encompasses user interfaces with a focus on search, information visualization with a focus on text, computational linguistics, and educational technology. She is the author of Search User Interfaces, the first academic book on that topic. She co-founded the ACM Learning@ Scale conference, is a former President of the Association for Computational Linguistics, a member of the CHI Academy and the SIGIR Academy, an ACM Fellow, an ACL Fellow, and has received four Excellence in Teaching Awards from the students of UC Berkeley. She received her PhD, MS, and BA degrees in Computer Science from UC Berkeley and was a member of the research staff at Xerox PARC.

Vlad Morariu, Adobe Research

Tuesday, August 22nd, 2023 – 1:30-2:30pm

Vlad Morariu is a senior research scientist with Adobe Research and is part of the Document Intelligence Lab (DIL). His research interests include combining computer vision, natural language, machine learning, and artificial intelligence techniques to develop rich visual and linguistic models for multimodal structured content. His current focus is to develop such models to power the next generation of document consumption and authoring experiences. Vlad received the BS and MS degrees from the Pennsylvania State University, in 2005, with Professor Octavia I. Camps as his thesis advisor. He received the PhD degree from the University of Maryland, in 2010, with Professor Larry S. Davis as his advisor. After completing his doctoral studies, he continued as a postdoctoral researcher and then as a research scientist at the University of Maryland until 2018, when he joined Adobe Research. He has co-authored more than 60 peer-reviewed publications including more than 30 in top-tier conferences (ICCV, CVPR, ECCV, NeurIPS, AAAI, EMNLP, ACL, NAACL). He served as area chair for WACV 2017, 2020-2023 and he served as program committee member for many computer vision and AI conferences, including Computer Vision and Pattern Recognition, ICCV, ECCV, AAAI, and IJCAI. He is currently an associate editor of IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI) and is currently serving as program chair for WACV 2024.

Seiichi Uchida, Kyushu University

Wednesday, August 23rd, 2023 – 1:30-2:30pm

What Are Letters?

We DAR researchers have been working on recognizing, understanding, and generating characters. In particular, we have dramatically improved the accuracy of recognition and generation with recent machine-learning techniques. Through those improvements, we can now detect and recognize scene texts and generate a variety of fonts. On the other hand, how much do we know about letters themselves? What is 'A?' How is the alphabet constructed? Why are there so many different fonts? In this talk, I would like to introduce some research results and open problems related to these questions. Prof. Uchida received B.E. and M.E., and Dr. Eng. degrees from Kyushu University, Japan, in 1990, 1992, and 1999, respectively. He is currently Senior Vice President and Distinguished Professor at Kyushu University. He was Co-Program Chair for ICDAR 2021, DAS 2012, and 2022.

Main Conference Program · Marriott

	Room A	Room B
	Sunday · 20 August 2023	
18:30 - 21:30	Welcome Reception	
	Monday · 21 August 2023	
08:30 - 09:30	Registration & Coffee	
09:30 - 10:20	Welcome	
10:20 - 10:50	Coffee Break	
10:50 - 12:30	Oral 1 - Graphics 1: Graphics Recognition	Oral 2 - D-NLP 1: Document NLP
12:30 - 13:30	Lunch	
13:30 - 14:30	Keynote: Marti Hearst	
14:30 - 15:30	Industry Panel	
15:30 - 16:00	Coffee Break	
16:00 - 18:00	Oral 3: Graphics 2: Tables and Charts	Oral 4: D-NLP2: Information Extraction
18:00 - 19:00	TC10/11 Meeting	
	Tuesday · 22 August 2023	
08:00 - 09:00	Registration & Coffee	
09:00 - 10:20	Oral 5: APPS1: Medical, Legal and Financial	Oral 6: Handwriting 1: Online Documents
10:20 - 10:50	Coffee Break	
10:50 - 12:30	Oral 7: DAR1: Document Layout Analysis	Oral 8: Handwriting 2: Historical Documents
12:30 - 13:30	Lunch	
13:30 - 14:30	Keynote: Vlad Morariu	
14:30 - 16:00	Coffee Break & Poster Session 1 & Doctoral Consortium	
16:00 - 18:00	Oral 9: DAR2: Camera Images and Scene Text	Oral 10: Handwriitng 3: Document Synthesis
19:00 - 22:00	Banquet	
	Wednesday · 23 August 2023	
08:00 - 09:00	Registration & Coffee	
09:00 - 10:20	Oral 11: Competitions	Oral 12: Graphics 3: Math Recognition
10:20 - 10:50	Coffee Break	
10:50 - 12:30	Oral 13: DAR3: Text and Document Recognition	Oral 14: APPS2: Document Analysis Systems
12:30 - 13:30	Lunch	
13:30 - 14:30	Keynote: Seiichi Uchida	
14:30 - 16:00	Coffee Break & Poster Session 2 & Doctoral Consortium	
16:00 - 18:00	ICDAR Awards Ceremony & Closing	

Post Conference Program · Adobe

Room A	Room B	Room C
Thursday · 24 August 2023		
Registration		
GREC (09:00-10:30)	ScalDoc (09:00 - 10:00)	Tutorial: Historical Documents (09:00 - 10:30)
Coffee Break		
GREC (11:00 - 12:30)	ScalDoc (10:15 - 12:30)	Tutorial: Historical Documents (11:00 - 12:00)
Lunch		
GREC (14:00 - 15:30)	IWCP+CBDAR (13:30 - 15:10)	Tutorial: Deep Learning (14:00 - 15:00)
Coffee Break		
GREC (16:00 - 17:45)	IWCP+CBDAR (15:30 - 17:00)	Tutorial: Deep Learning (15:30 - 16:30)
Friday · 25 August 2023		
Registration		
HIP (09:00 - 10:25)	ADAPDA (09:00 - 11:30)	Tutorial: Binarization (09:00 - 10:30)
Coffee Break		
HIP (10:45 - 12:20)	VINALDO (11:00 - 12:15)	Tutorial: Binarization (11:00 - 12:30)
Lunch		
HIP (13:30 - 14:30)	VINALDO (13:30 - 14:50)	Tutorial: Document Intelligence (13:30 - 15:00)
Coffee Break		
HIP (15:00 - 16:30)	VINALDO (15:10 - 17:00)	Tutorial: Document Intelligence (15:30 - 17:00)
Saturday · 26 August 2023		
Registration		
WML (09:00 - 10:30)		
Coffee Break		
WML (11:00 - 12:30)		
Lunch		
WML (14:00 - 15:30)		
Coffee Break		
WML (16:00 - 17:30)		

Monday · 21 August

Oral Session 1:

Graphics 1: Graphics Recognition

O1.1 10:50 — 11:10

A Holistic Approach for Aligned Music and Lyrics Transcription
Juan C. Martinez-Sevilla, Antonio Rios-Vila, Francisco J. Castellanos and Jorge Calvo-Zaragoza

O1.2 11:10 — 11:30

End-to-end Optical Music Recognition for Pianoform Sheet Music
Antonio Ríos-Vila, David Rizo, José M. Iñesta, Jorge Calvo-Zaragoza

O1.3 11:30 — 11:50

A multi-level synthesis strategy for online handwritten chemical equation recognition
Haoyang Shen, Jinrong Li, Jianmin Lin and Wei Wu

O1.4 11:50 — 12:10

Context and Structure Understanding Oriented Chart Object Detection
Pengyu Yan, Saleem Ahmed and David Doermann

O1.5 12:10 — 12:30

SCI-3000: A Dataset for Figure, Table and Caption Extraction from Scientific PDFs
Filip Darmanović, Allan Hanbury and Markus Zlabinger

Oral Session 2:

D-NLP1: Document NLP

O2.1 10:50 — 11:10

Consistent Nested Named Entity Recognition in handwritten documents via Lattice Rescoring
David Villanova-Aparisi, Carlos David Martinez-Hinarejos, Verónica Romero and Moisés Pastor-Gadea

O2.2 11:10 — 11:30

Search for Hyphenated Words in Probabilistic Indices: a Machine Learning Approach
José Andrés, Alejandro H. Toselli and Enrique Vidal

O2.3 11:30 — 11:50

A Unified Document-level Chinese Discourse Parser on Different Granularity Levels
Weihao Liu, Feng Jiang, Yaxin Fan, Xiaomin Chu, Peifeng Li and Qiaoming Zhu

O2.4 11:50 — 12:10

LSTM-Based Siamese Neural Network for Urdu News Story Segmentation
Muhammad Nauman Ahmed Bhatti, Imran Siddiqi, Momina Moetesum

O2.5 12:10 — 12:30

Large Scale Genealogical Information Extraction From Handwritten Quebec Parish Records
Solène Tarride , Martin Maarand, Mélodie Boillet, James McGrath, Eugénie Capel, Hélène Vézina, Christopher Kermorvant

Monday · 21 August

Oral Session 3:

Graphics 2: Tables & Charts

O3.1 16:00 — 16:20

A Study on Reproducibility and Replicability of Table Structure Recognition Methods
Kehinde Ajayi, Muntabir Choudhury, Sarah Rajtmajer and Jian Wu

O3.2 16:20 — 16:40

An End-to-End Local Attention Based Model for Table Recognition
Nam Tuan Ly and Atsuhiro Takasu

O3.3 16:40 — 17:00

Optimized Table Tokenization for Table Structure Recognition
Maksym Lysak, Ahmed Nassar, Nikolaos Livathinos, Christoph Auer and Peter Staar

O3.4 17:00 — 17:20

Towards End-to-End Semi-Supervised Table Detection with Deformable Transformer
Tahira Shehzadi, Khurram Azeem Hashmi, Didier Stricker, Marcus Liwicki and Muhammad Zeshan Afzal

O3.5 17:20 — 17:40

SpaDen : Sparse and Dense Keypoint Estimation for Real-World Chart Understanding
Saleem Ahmed, David Doermann, Srirangaraj Setlur, Venu Govindaraju and Pengyu Yan

O3.6 17:40 — 18:00

Generalization of Fine Granular Extractions from Charts
Shubham Singh Paliwal, Manasi Patwardhan and Lovekesh Vig

Oral Session 4:

D-NLP2: Information Extraction

O4.1 16:00 — 16:20

Improving Information Extraction from Semi-Structured Documents Using Attention based Semi-variational Graph Auto-encoder
Djedjiga Belhadj, Abdel Belaïd and Yolande Belaïd

O4.2 16:20 — 16:40

Language Independent Neuro-Symbolic Semantic Parsing for Form Understanding
Bhanu Prakash Voutharoja, Lizhen Qu and Fatemeh Shiri

O4.3 16:40 — 17:00

DocILE Benchmark for Document Information Localization and Extraction
Štěpán Šimsa, Milan Šulc, Michal Uřičář, Yash Patel, Ahmed Hamdi, Matěj Kocián, Matyáš Skalický, Jiří Matas, Antoine Doucet, Mickaël Coustaty and Dimosthenis Karatzas

O4.4 17:00 — 17:20

Robustness Evaluation of Transformer-based Form Field Extractors via Form Attacks
Le Xue, Mingfei Gao, Zeyuan Chen, Caiming Xiong and Ran Xu

O4.5 17:20 — 17:40

Key-value information extraction from full handwritten pages
Solène Tarride, Mélodie Boillet and Christopher Kermorvant

O4.6 17:40 — 18:00

Information Extraction from Documents: Question Answering vs Token Classification in real-world setups
Laurent Lam, Pirashanth Ratnamogan, Joël Tang, William Vanhuffel and Fabien Caspani

Tuesday · 22 August

Oral Session 5:

Applications 1: Medical, Legal, and Financial

O5.1 09:00 — 09:20

Multi-Stage Fine-tuning Deep Learning Models Improves Automatic Assessment of the Rey-Osterrieth Complex Figure Test
Benjamin Schuster, Florian Kordon, Martin Mayr, Mathias Seuret and Vincent Christlein

O5.2 09:20 — 09:40

Structure Diagram Recognition in Financial Announcements
Meixuan Qiao, Jun Wang, Junfu Xiang, Qiyu Hou and Ruixuan Li

O5.3 09:40 — 10:00

TransDocAnalyser: A framework for semi-structured offline handwritten documents analysis with an application to legal domain
Sagar Chakraborty, Gaurav Harit and Saptarshi Ghosh

O5.4 10:00 — 10:20

Inv3D: A High-Resolution 3D Invoice Dataset for Template-Guided Single-Image Document Unwarping
Felix Hertlein, Alexander Naumann, Patrick Philipp

Oral Session 6:

Handwriting 1: Online Documents

O6.1 09:00 — 09:20

Online Handwriting Trajectory Reconstruction from Kinematic Sensors using Temporal Convolutional Network
Wassim Swaileh, Florent Imbert, Yann Soullard, Romain Tavenard, Eric Anquetil

O6.2 09:20 — 09:40

IAMonSense: Multi-level Handwriting Classification using Spatio-temporal Information
Ahmad Mustafid, Junaid Younas, Paul Lukowicz, Sheraz Ahmed

O6.3 09:40 — 10:00

SET, SORT! A Novel Sub-Stroke Level Transformer for Offline Handwriting to Online Conversion
Elmokhtar Mohamed Moussa, Thibault Lelore and Harold Mouchère

O6.4 10:00 — 10:20

Character Queries: A Transformer-based Approach to On-Line Handwritten Character Segmentation
Michael Jungo, Beat Wolf, Andrii Maksai, Claudiu Musat and Andreas Fischer

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Oral Session 7:

DAR1: Document Layout Analysis

O7.1 10:50 — 11:10

SwinDocSegmenter: An End-to-End Unified Domain Adaptive Transformer for Document Instance Segmentation

Ayan Banerjee, Sanket Biswas, Josep Lladós and Umapada Pal

O7.2 11:10 — 11:30

BaDLAD: A Large Multi-Domain Bengali Document Layout Analysis Dataset

Md. Istiak Hossain Shihab, Md. Rakibul Hasan, Mahfuzur Rahman Emon, Syed Mobassir Hossen, Md. Nazmuddoha Ansary, Intesur Ahmed, Fazle Rabbi Rakib, Shahriar Elahi Dhruvo, Souhardya Saha Dip, Akib Hasan Pavel, Marsia Haque Meghla, Md. Rezwanul Haque, Sayma Sultana Chowdhury, Farig Sadeque, Tahsin Reasat, Ahmed Imtiaz Humayun and Asif Shahriyar Sushmit

O7.3 11:30 — 11:50

SelfDocSeg: A self-supervised vision-based approach towards Document Segmentation

Subhajit Maity, Sanket Biswas, Siladittya Manna, Ayan Banerjee, Josep Lladós, Saumik Bhattacharya and Umapada Pal

O7.4 11:50 — 12:10

Line Extraction in Handwritten Documents via Instance Segmentation

Adeela Islam, Tayaba Anjum, Nazar Khan

O7.5 12:10 — 12:30

Diffusion-based document layout generation

Liu He, Yijuan Lu, John Corring, Dinei Florencio and Cha Zhang

Oral Session 8:

Handwriting 2: Historical Documents

O8.1 10:50 — 11:10

DTDT: Highly Accurate Dense Text Line Detection in Historical Documents via Dynamic Transformer

Haiyang Li, Chongyu Liu, Jiapeng Wang, Mingxin Huang, Weiying Zhou and Lianwen Jin

O8.2 11:10 — 11:30

The Bullinger Writer Adaptation Challenge

Anna Scius-Bertrand and Andreas Fischer

O8.3 11:30 — 11:50

Towards Writer Retrieval for Historical Datasets

Marco Peer, Florian Kleber and Robert Sablatnig

O8.4 11:50 — 12:10

HisDoc R-CNN: Robust Chinese Historical Document Text Line Detection with Dynamic Rotational Proposal Network and Iterative Attention Head

Cheng Jian, Lianwen Jin, Lingyu Liang and Chongyu Liu

O8.5 12:10 — 12:30

Keyword Spotting Simplified: A Segmentation-Free Approach using Character Counting and CTC re-scoring

George Retsinas, Giorgos Sfikas and Christophoros Nikou

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Poster Session 1: 14:30 - 16:00

P1-1 D-NLP

Evaluation of different tagging schemes for Named Entity Recognition in Handwritten Documents
David Villanova-Aparisi, Carlos David Martinez-Hinarejos, Verónica Romero and Moisés Pastor-Gadea

P1-2 D-NLP

DAMGCN: Entity Linking in Visually Rich Documents with Dependency-Aware Multimodal Graph Convolutional Network
Yi-Ming Chen, Xiang-Ting Hou, Dong-Fang Lou, Zhi-Lin Liao and Cheng-Lin Liu

P1-3 D-NLP

RealCQA: Scientific Chart Question Answering as a Test-bed for First-Order Logic
Saleem Ahmed, Bhavin Jawade, Shubham Pandey, Srirangaraj Setlur and Venu Govindaraju

P1-4 D-NLP

QuOTeS: Query-Oriented Technical Summarization
Juan Antonio Ramirez-Orta, Eduardo Xamena, Ana Maguitman, Axel J. Soto, Flavia P. Zanoto and Evangelos Milios

P1-5 D-NLP

Explain Thyself Bully": Sentiment Aided Cyberbullying Detection with Explanation
Krishanu Maity, Prince Jha, Raghav Jain, Sriparna Saha and Pushpak Bhattacharyya

P1-6 D-NLP

Topic Shift Detection in Chinese Dialogues: Corpus and Benchmark
Jiangyi Lin, Yaxin Fan, Feng Jiang, Xiaomin Chu and Peifeng Li

P1-7 D-NLP

CED: Catalog Extraction from Documents
Tong Zhu, Guoliang Zhang, Zechang Li, Zijian Yu, Junfei Ren, Mengsong Wu, Zhefeng Wang, Baoxing Huai, Pingfu Chao and Wenliang Chen

P1-8 D-NLP

Multimodal Rumour Detection: Catching news that never transpired!
Raghvendra Kumar, Ritika Sinha, Sriparna Saha and Adam Jatowt

P1-9 D-NLP

I-WAS: a Data Augmentation Method with GPT-2 for Simile Detection
Yongzhu Chang, Rongsheng Zhang and Jiashu Pu

P1-10 Data and Synthesis

On Web-based Visual Corpus Construction for Visual Document Understanding
DongHyun Kim, Teakgyu Hong, Moonbin Yim, Yoonsik Kim and Geewook Kim

P1-11 Data and Synthesis

Analyzing Font Style Usage and Contextual Factors in Real Images
Naoya Yasukochi, Hideaki Hayashi, Daichi Haraguchi and Seiichi Uchida

P1-12 Data and Synthesis

ESTER-Pt: An Evaluation Suite for TExt Recognition in Portuguese
Moniele Kunrath Santos, Guilherme Bazzo, Lucas Lima de Oliveira and Viviane P. Moreira

P1-13 Data and Synthesis

TextREC: a Dataset for Referring Expression Comprehension with Reading Comprehension
Chenyang Gao, Biao Yang, Hao Wang, Mingkun Yang, Wenwen Yu, Yuliang Liu and Xiang Bai

P1-14 Data and Synthesis

DocImagen: Diffusion Model for Layout Conditioned Document Image Generation
Noman Tanveer, Adnan Ul-Hasan and Faisal Shafait

P1-15 Data and Synthesis

EnsExam: A Dataset for Handwritten Text Erasure on Examination Papers
Liufeng Huang, Bangdong Chen, Chongyu Liu, Dezhi Peng, Weiying Zhou, Yaqiang Wu, Hui Li, Hao Ni and Lianwen Jin

P1-16 Graphics

Aligning benchmark datasets for table structure recognition
Brandon Smock, Rohith Pesala and Robin Abraham

P1-17 Graphics

Line-of-sight with Graph Attention Parser (LGAP) for Math Formulas
Ayush Kumar Shah and Richard Zanibbi

P1-18 Graphics

Line Graphics Digitization: A Step Towards Full Automation
Omar Moured, Jiaming Zhang, Alina Roitberg, Thorsten Schwarz and Rainer Stiefelhagen

P1-19 Graphics

TRACE:Table Reconstruction Aligned to Corner and Edges
Youngmin Baek, Daehyun Nam, Jaeheung Surh, Seung Shin and Seonghyeon Kim

P1-20 Graphics

Towards Making Flowchart Images Machine Interpretable
Shreya Shukla, Prajwal Gatti, Yogesh Kumar, Vikash Yadav and Anand Mishra

P1-21 Graphics

GriTS: Grid table similarity metric for table structure recognition
Brandon Smock, Rohith Pesala and Robin Abraham

P1-22 Handwriting

Improving Handwritten OCR with Training Samples Generated by Glyph Conditional Denoising Diffusion Probabilistic Model
Haisong Ding, Bozhi Luan, Dongnan Gui, Kai Chen and Qiang Huo

P1-23 Handwriting

Vision Conformer: Incorporating Convolutions into Vision Transformer Layers
Brian Kenji Iwana and Akihiro Kusuda

P1-24 Handwriting

Exploring Semantic Word Representations for Recognition-free NLP on Handwritten Document Images
Oliver Tüselmann and Gernot A. Fink

P1-25 Handwriting

A Unified Architecture for Urdu Printed and Handwritten Text Recognition
Arooba Maqsood, Nauman Riaz, Adnan Ul-Hasan and Faisal Shafait

P1-26 Handwriting

Linguistic Knowledge within Handwritten Text Recognition Models: A Real-World Case Study
Samuel Londner, Yoav Phillips, Hadar Miller, Nachum Dershowitz, Tsvi Kuflik and Moshe Lavee

P1-27 Handwriting

Faster DAN: Multi-target Queries with Document Positional Encoding for End-to-end Handwritten Document Recognition
Denis Coquenet, Clément Chatelain and Thierry Paquet

P1-28 Handwriting

DSS: Synthesizing long Digital Ink using Data augmentation, Style encoding and Split generation
Aleksandr Timofeev, Anastasiia Fadeeva, Andrii Maksai, Claudiu Musat and Andrei Afonin

P1-29 Handwriting

Fine-tuning Vision Encoder-Decoder Transformers for Handwriting Text Recognition on Historical Documents
Daniel Parres Montoya and Roberto Paredes Palacios

P1-30 Handwriting

Incremental Teacher Model with Mixed Augmentations and Scheduled Pseudo-Label Loss for Handwritten Text Recognition
Masayuki Honda, Hung Tuan Nguyen, Cuong Tuan Nguyen, Cong Kha Nguyen, Ryosuke Odate, Takashi Kanemaru and Masaki Nakagawa

P1-31 Handwriting

SeamFormer: High Precision Text Line Segmentation for Handwritten Documents
Niharika Vadlamudi, Rahul Krishna and Ravi Kiran Sarvadevabhatla

P1-32 Handwriting

Adversarial Attacks on Convolutional Siamese Signature Verification Networks
Maham Jahangir, Muhammad Imran Malik and Faisal Shafait

P1-33 Handwriting

Towards Writing Style Adaptation in Handwriting Recognition
Jan Kohút, Michal Hradiš and Martin Kišš

P1-34 Handwriting

Group, Contrast and Recognize: A Self-supervised Method for Chinese Character Recognition
Xinzhe Jiang, Jun Du, Pengfei Hu, Mobai Xue, Jiefeng Ma, Jiajia Wu and Jianshu Zhang

P1-35 Handwriting

Weakly supervised information extraction from inscrutable handwritten document images
Sujoy Paul, Gagan Madan, Akankshya Mishra, Narayan Hegde, Pradeep Kumar and Gaurav Aggarwal

P1-36 Scene Text

TDAE: Text Detection with Affinity Areas and Evolution Strategies
Kefan Ma, Yuchen Luo, Zheng Huang, Kai Chen, Jie Guo and Weidong Qiu

P1-37 Scene Text

Scene Text Recognition with Image-Text Matching-guided Dictionary
Jiajun Wei, Hongjian Zhan, Xiao Tu, Yue Lu and Umapada Pal

P1-38 Scene Text

Open-Set Text Recognition via Shape-Awareness Visual Reconstruction
Chang Liu, Chun Yang and Xu-Cheng Yin

P1-39 Scene Text

Text Enhancement Scene Text Recognition in Hazy Weather
En Deng, Gang Zhou, Jiakun Tian, Yangxin Liu and Zhenhong Jia

P1-40 Scene Text

TPFNet: A Novel Text In-painting Transformer for Text Removal
Onkar Susladkar, Dhruv Makwana, Gayatri Deshmukh, Sparsh Mittal, R Sai Chandra Teja and Rekha Singhal

P1-41 Text & Document Recognition

Incremental Learning and Ambiguity Rejection for Document Classification
Tri-Cong Pham, Mickaël Coustaty, Aurélie Joseph, Vincent Poulain D'Andecy, Muriel Visani and Nicolas Sidere

P1-42 Text & Document Recognition

A Graphical Approach to Document Layout Analysis
Jilin Wang, Michael Krumdick, Baojia Tong, Delphine Vendryes, Hamima Halim, Maxim Sokolov, Vadym Barda and Chris Tanner

P1-43 Text & Document Recognition

Ensuring an error-free transcription on a full engineering tags dataset through unsupervised Post-OCR methods
Mathieu Francois and Véronique Eglin

P1-44 Text & Document Recognition

Optimizing the Performance of Text Classification Models by Improving the Isotropy of the Embeddings using a Joint Loss Function
Joseph Attieh, Abraham Woubie Zewoudie, Vladimir Vlassov, Adrian Flanagan and Tom Bäckström

P1-45 Text & Document Recognition

DocParser: end-to-end OCR-free information extraction from Visually Rich Documents
Mohamed Dhouib, Ghassen Bettaieb and Aymen Shabou

P1-46 Text & Document Recognition

A Hybrid Approach to Document Layout Analysis for Heterogeneous Document Images
Zhuoyao Zhong, Jiawei Wang, Haiqing Sun, Kai Hu, Erhan Zhang, Lei Sun and Qiang Huo

P1-47 Text & Document Recognition

You Only Look for a Symbol Once: An Object Detector for Symbols and Regions in Documents
William Smith and Toby Pillatt

P1-48 Text & Document Recognition

TACTFUL: A framework for Targeted Active Learning for Document Analysis
Venkatapathy Subramanian, Sagar Poudel, Ganesh Ramakrishnan and Parag Chaudhuri

P1-49 Text & Document Recognition

Evaluating Adversarial Robustness on Document Image Classification
Timothée Fronteau, Arnaud Paran and Aymen Shabou

P1-50 Text & Document Recognition

Layout Analysis of Historical Document Images using a Light Fully Convolutional Networks
Najoua Rahal, Lars Vögtlin and Rolf Ingold

P1-51 Text & Document Recognition

Detecting Text on Historical Maps by Selecting Best Candidates of Deep Neural Networks Output
Gerasimos Matidis, Basilis Gatos, Anastasios Kesidis and Panagiotis Kaddas

P1-52 Competition

ICDAR 2023 Competition on Video Text Reading for Dense and Small Text
Weijia Wu, Yuzhong Zhao, Zhuang Li, Jiahong Li, Mike Zheng Shou, Umapada Pal, Dimosthenis Karatzas and Xiang Bai

P1-53 Competition

ICDAR 2023 Competition on Born Digital Video Text Question Answering
Zhibo Yang, Xiaoge Song, Sibo Song, Tong Lu, Xiang Bai, Cheng-Lin Liu, Fei Huang and Cong Yao

P1-54 Competition

ICDAR 2023 Competition on Indic Handwriting Text Recognition
Ajoy Mondal and C. V. Jawahar

P1-55 Competition

ICDAR 2023 Competition on Reading the Seal Title
Wenwen Yu, Mingyu Liu, Mingrui Chen, Ning Lu, Yinlong Wen, Yuliang Liu, Dimosthenis Karatzas and Xiang Bai

P1-56 Competition

ICDAR 2023 Competition on Detecting Tampered Text in Images
Dongliang Luo, Yu Zhou, Rui Yang, Yuliang Liu, Xianjin Liu, Jishen Zeng, Enming Zhang, Biao Yang, Ziming Huang, Lianwen Jin and Xiang Bai

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Oral Session 9:

DAR 2: Camera Images and Scene Text

O9.1 16:00 — 16:20

ViSA: Visual and Semantic Alignment for Robust Scene Text Recognition
Zhenru Pan, Zhilong Ji, Xiao Liu, Jinfeng Bai and Cheng-Lin Liu

O9.2 16:20 — 16:40

An Accurate Approach to Real-time Machine Readable Zone Detection with Mobile Devices
Alexander Gayer, Daria Ershova, Vladimir V. Arlazarov

O9.3 16:40 — 17:00

DQ-DETR: Dynamic Queries Enhanced Detection Transformer for Arbitrary Shape Text Detection
Chixiang Ma, Lei Sun, Jiawei Wang and Qiang Huo

O9.4 17:00 — 17:20

Decoupling Visual-Semantic Features Learning with Dual Masked Autoencoder for Self-Supervised Scene Text Recognition
Zhi Qiao, Zhilong Ji, Ye Yuan and Jinfeng Bai

O9.5 17:20 — 17:40

Re-thinking Text Clustering for Images with Text
Shwet Kamal Mishra, Soham Joshi and Viswanath Gopalakrishnan

O9.6 17:40 — 18:00

Scene Table Structure Recognition with Segmentation and Key Point Collaboration
Li Zhuoming, Peng Fan, Xue Yang, Ni Hao and Jin Lianwen

Oral Session 10:

Handwriting 3: Document Synthesis

O10.1 16:00 — 16:20

Historical Document Image Analysis using Controlled Data for Pre-Training
Najoua Rahal, Lars Vögtlin, Rolf Ingold

O10.2 16:20 — 16:40

Handwritten Text Generation with Character-specific Encoding for Style Imitation
Jan Zdenek and Hideki Nakayama

O10.3 16:40 — 17:00

How to Choose Pretrained Handwriting Recognition Models for Single Writer Fine-Tuning
Vittorio Pippi, Silvia Cascianelli, Christopher Kermorvant and Rita Cucchiara

O10.4 17:00 — 17:20

TBM-GAN: Synthetic Document Generation with Degraded Background
Arnab Poddar, Soumyadeep Dey, Pratik Jawanpuria, Jayanta Mukhopadhyay and Prabir Kumar Biswas

O10.5 17:20 — 17:40

Styled Text-to-Text-Content-Image Generation with Latent Diffusion Models
Konstantina Nikolaidou, George Retsinas, Vincent Christlein, Mathias Seuret, Giorgos Sfikas, Elisa Barney Smith, Hamam Mokayed and Marcus Liwicki

O10.6 17:40 — 18:00

Zero-shot Generation of Training Data with Denoising Diffusion Probabilistic Model for Handwritten Chinese Character Recognition
Dongnan Gui, Kai Chen, Haisong Ding and Qiang Huo

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Oral Session 11:

Competitions

O11.1 09:00 — 09:20

ICDAR 2023 CROHME: Competition on Recognition of Handwritten Mathematical Expressions
Yejing Xie, Harold Mouchère, Foteini Simistira Liwicki, Sumit Rakesh, Rajkumar Saini, Masaki Nakagawa, Cuong Tuan Nguyen and Thanh-Nghia Truong

O11..2 09:20 — 09:40

ICDAR 2023 Competition on Hierarchical Text Detection and Recognition
Shangbang Long, Siyang Qin, Dmitry Panteleev, Alessandro Bissacco, Yasuhisa Fujii and Michalis Raptis

O11.3 09:40 — 10:00

ICDAR 2023 Competition on RoadText Video Text Detection, Tracking and Recognition
George Tom, Minesh Mathew, Sergi Garcia, Dimosthenis Karatzas and C V Jawahar

O11.4 10:00 — 10:20

ICDAR 2023 Competition on Document UnderstanDing of Everything (DUDE)
Jordy Van Landeghem, Rubèn Tito, Łukasz Borchmann, Michał Pietruszka, Dawid Jurkiewicz, Rafał Powalski, Paweł Józiak, Sanket Biswas, Mickaël Coustaty and Tomasz Stanisławek

Oral Session 12:

Graphics 3: Math Recognition

O12.1 09:00 — 09:20

Relative position embedding asymmetric siamese network for Offline handwritten mathematical expression recognition
Chunyi Wang, Wei Hu, Xiaqing Rao, Runqi Luohu, Ning Bi and Tan Jun

O12.2 09:20 — 09:40

EDSL: An Encoder-Decoder Architecture with Symbol-Level Features for Printed Mathematical Expression Recognition
Yingnan Fu, Tingting Liu, Ming Gao and Aoying Zhou

O12.3 09:40 — 10:00

Semantic Graph Representation Learning for Handwritten Mathematical Expression Recognition
Zhuang Liu, Ye Yuan, Zhilong Ji, Jinfeng Bai and Xiang Bai

O12.4 10:00 — 10:20

An Encoder-Decoder Method with Position-Aware for Printed Mathematical Expression Recognition
Quan Hong, Jun Long and Liu Yang

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Oral Session 13:

DAR 3: Text and Document Recognition

O13.1 10:50 — 11:10

A hybrid model for multilingual OCR
David Etter, Cameron Carpenter and Nolan King

O13.2 11:10 — 11:30

Multi-Teacher Knowledge Distillation for End-to-End Text Image Machine Translation
Cong Ma, Yaping Zhang, Mei Tu, Yang Zhao, Yu Zhou and Chengqing Zong

O13.3 11:30 — 11:50

Printed Ottoman Text Recognition Using Synthetic Data and Data Augmentation
Esma F. Bilgin Tasdemir

O13.4 11:50 — 12:10

Classification of Incunable Glyphs and Out-of-distribution Detection with Joint Energy-based Models
Florian Kordon, Nikolaus Weichselbaumer, Randall Herz, Stephen Mossman, Edward Potten, Mathias Seuret, Martin Mayr, Vincent Christlein

O13.5 12:10 — 12:30

Analyzing the Potential of Active Learning for Document Image Classification
Saifullah Saifullah, Stefan Agne, Andreas Dengel, Sheraz Ahmed

Oral Session 14:

Applications 2: Document Analysis Systems

O14.1 10:50 — 11:10

Multimodal Scoring Model for Handwritten Chinese Essay
Tonghua Su, Jifeng Wang, Hongming You and Zhongjie Wang

O14.2 11:10 — 11:30

FCN-Boosted Historical Map Segmentation with Little Training Data
Josef Baloun, Ladislav Lenc and Pavel Král

O14.3 11:30 — 11:50

MemeGraphs: Linking Memes to Knowledge Graphs
Vasiliki Kougia, Simon Fetzel, Thomas Kirchmair, Erion Çano, Sina Baharlou, Sahand Sharifzadeh and Benjamin Roth

O14.4 11:50 — 12:10

Scheme for Palimpsests Reconstruction Using Synthesized Dataset
Boraq Madi, Reem Alaasam, Raed Shammas and Jihad El-Sana

O14.5 12:10 — 12:30

Context Aware Document Binarization and Its Application to Information Extraction from Structured Documents
Ján Koloda and Jue Wang

Wednesday · 23 August

Poster Session 2: 14:30 - 16:00

P2-1 D-NLP

Analyzing the Impact of Tokenization on Multilingual Epidemic Surveillance in Low-resource Languages
Stephen Mutuvi, Emanuela Boros, Antoine Doucet, Adam Jatowt, Gaël Lejeune and Moses Odeo

P2-2 D-NLP

Analysing Textual Information from Financial Statements for Default Prediction
Chinesh Doshi, Himani Shrotriya, Rohit Bhiogade, Himanshu Sharad Bhatt and Abhishek Jha

P2-3 D-NLP

An Iterative Graph Learning Convolution Network for Key Information Extraction Based on the Document Inductive Bias
Jiyao Deng, Yi Zhang, Xinpeng Zhang, Zhi Tang and Liangcai Gao

P2-4 D-NLP

A Benchmark of Nested Named Entity Recognition Approaches in Historical Structured Documents
Solenn Tual, Nathalie Abadie, Bertrand Duménieu, Joseph Chazalon and Edwin Carlinet

P2-5 D-NLP

LayoutGCN: A Lightweight Architecture for Visually Rich Document Understanding
Dengliang Shi, Siliang Liu, Jintao Du and Huijia Zhu

P2-6 D-NLP

Detecting Forged Receipts with Domain-specific Ontology-based Entities & Relations
Beatriz Martínez Tornés, Emanuela Boros, Petra Gomez-Krämer, Antoine Doucet and Jean-Marc Ogier

P2-7 D-NLP

A Character-level Document Key Information Extraction Method with Contrastive Learning
Xinpeng Zhang, Liangcai Gao and Jiyao Deng

P2-8 D-NLP

Semantic triple-assisted learning for question answering passage re-ranking
Dinesh Nagumothu, Bahadorreza Ofoghi and Peter Eklund

P2-9 D-NLP

Information Redundancy and Biases in Public Document Information Extraction Benchmarks
Seif Edinne Laatiri, Pirashanth Ratnamogan, Joël Tang, Laurent Lam, William Vanhuffel and Fabien Caspani

P2-10 Data and Synthesis

Ambigram Generation by A Diffusion Model
Takahiro Shirakawa and Seiichi Uchida

P2-11 Data and Synthesis

CCpdf: Building a High Quality Corpus for Visually Rich Documents from Web Crawl Data
Michał Turski, Tomasz Stanisławek, Karol Kaczmarek, Paweł Dyda and Filip Graliński

P2-12 Data and Synthesis

Augraphy: A Data Augmentation Library for Document Images
Alexander Groleau, Kok Wei Chee, Stefan Larson, Samay Maini and Jonathan Boarman

P2-13 Data and Synthesis

SIMARA: a database for key-value information extraction from full-page handwritten documents
Solène Tarride, Mélodie Boillet, Jean-François Moufflet and Christopher Kermorvant

P2-14 Data and Synthesis

Receipt Dataset for Document Forgery Detection
Beatriz Martínez Tornés, Théo Taburet, Emanuela Boros, Kais Rouis, Petra Gomez-Krämer, Nicolas Sidere, Antoine Doucet and Vincent Poulain d'Andecy

P2-15 Data and Synthesis

MIDV-Holo: a dataset for ID document hologram detection in a video stream
Leisan Koliaskina, Ekaterina Emelianova, Daniil Tropin, Vladimir Popov, Konstantin Bulatov, Dmitry Nikolaev and Vladimir V. Arlazarov

P2-16 Graphics

LineFormer: Line Chart Data Extraction using Instance Segmentation
Jay Lal, Aditya Mitkari, Mahesh Bhosale and David Doermann

P2-17 Graphics

PyramidTabNet: Transformer based Table Recognition in Image-based Documents
Muhammad Umer, Ahmed Mohsin, Adnan Ul-Hasan and Faisal Shafait

P2-18 Graphics

Linear Object Detection in Document Images using Multiple Object Tracking
Philippe Bernet, Joseph Chazalon, Edwin Carlinet, Alexandre Bourquelot and Elodie Puybareau

P2-19 Graphics

Contour Completion by Transformers and Its Application to Vector Font Data
Yusuke Nagata, Brian Kenji Iwana and Seiichi Uchida

P2-20 Graphics

Formerge: Recover spanning cells in complex table structure using transformer network
Nam Quan Nguyen, Anh Duy Le, Anh Khoa Lu, Xuan Toan Mai and Tuan Anh Tran

P2-21 Handwriting

A Shallow Graph Neural Network with Innovative Node Updating for Online Handwritten Stroke Classification
Yan-Rong Wang, Da-Han Wang, Xiao-Long Yun, Yan-Ming Zhang, Fei Yin and Shunzhi Zhu

P2-22 Handwriting

Improved Learning for Online Handwritten Chinese Text Recognition with Convolutional Prototye Network
Yi Chen, Heng Zhang and Cheng-Lin Liu

P2-23 Handwriting

Modeling Cross-layer Interaction for Chinese Calligraphy Style Classification
Zhigang Li, Li Liu, Taorong Qiu, Yue Lu and Ching Y. Suen

P2-24 Handwriting

OCR Language Models with Custom Vocabularies
Peter Garst, Yasuhisa Fuji and Reeve Ingle

P2-25 Handwriting

Sampling and Ranking for Digital Ink Generation on a tight computational budget
Andrii Maksai, Andrei Afonin, Aleksandr Timofeev and Claudiu Musat

P2-26 Handwriting

Decoupled Learning for Long-Tailed Oracle Character Recognition
Jing Li, Bin Dong, Qiu-Feng Wang, Lei Ding, Rui Zhang and Kaizhu Huang

P2-27 Handwriting

Shared-Operation Hypercomplex Networks for Handwritten Text Recognition
Giorgos Sfikas, George Retsinas, Panagiotis Dimitrakopoulos, Basilis Gatos and Christophoros Nikou

P2-28 Handwriting

Precise Segmentation for Children Handwriting Analysis by Combining Multiple Deep Models with Online Knowledge
Simon Corbillé, Éric Anquetil and Élisa Fromont

P2-29 Handwriting

Finetuning Is a Surprisingly Effective Domain Adaptation Baseline in Handwriting Recognition
Jan Kohút and Michal Hradiš

P2-30 Handwriting

AFFGANwriting: A handwriting image generation method based on multi-feature fusion
Heng Wang, Yiming Wang and Hongxi Wei

P2-31 Handwriting

SegCTC: Offline Handwritten Chinese Text Recognition via Better Fusion between Explicit and Implicit Segmentation
Jiarong Huang, Dezhi Peng, Hongliang Li, Hao Ni and Lianwen Jin

P2-32 Handwriting

A System for Processing and Recognition of Greek Byzantine and Post-Byzantine Documents
Panagiotis Kaddas, Konstantinos Palaiologos, Basilis Gatos, Vassilis Katsouros and Katerina Christopoulou

P2-33 Handwriting

Historical document image segmentation combining deep learning and Gabor features
Maroua Mehri, Akrem Sellami and Salvatore Tabbone

P2-34 Handwriting

Content-Aware Urdu Handwriting Generation
Zeeshan Memon, Adnan Ul-Hasan and Faisal Shafait

P2-35 Scene Text

Text Reading Order in Uncontrolled Conditions by Sparse Graph Segmentation
Renshen Wang, Yasuhisa Fujii and Alessandro Bissacco

P2-36 Scene Text

Visual Information Extraction in the Wild: Practical Dataset and End-to-end Solution
Jianfeng Kuang, Wei Hua, Dingkang Liang, Mingkun Yang, Deqiang Jiang, Bo Ren and Xiang Bai

P2-37 Scene Text

E2TIMT: Efficient and Effective Modal Adapter for Text Image Machine Translation
Cong Ma, Yaping Zhang, Mei Tu, Yang Zhao, Yu Zhou and Chengqing Zong

P2-38 Scene Text

Accelerating Transformer-Based Scene Text Detection and Recognition via Token Pruning
Sergi Garcia-Bordils, Dimosthenis Karatzas and Marçal Rusiñol

P2-39 Scene Text

Reading Between the Lanes: Text VideoQA on the Road
George Tom, Minesh Mathew, Sergi Garcia, Dimosthenis Karatzas and C.V. Jawahar

P2-40 Text & Document Recognition

Transductive Learning for Near-Duplicate Image Detection in Scanned Photo Collections
Lluis Gomez, Francesc Net, Pep Casals-Puig and Marc Folia

P2-41 Text & Document Recognition

EEBO-Verse: Sifting for Poetry in Large Early Modern Corpora using Visual Features
Danlu Chen, Nan Jiang and Taylor Berg-Kirkpatrick

P2-42 Text & Document Recognition

Gaussian Kernels based Network for Multiple License Plate Number Detection in Day-Night Images
Soumi Das, Shivakumara Palaiahnakote, Umapada Pal and Raghavendra Ramachandra

P2-43 Text & Document Recognition

Unraveling confidence: examining confidence scores as proxy for OCR quality
Mirjam Cuper, Corine van Dongen and Tineke Koster

P2-44 Text & Document Recognition

FTDNet: Joint Semantic Learning for Scene Text Detection in Adverse Weather Conditions
Jiakun Tian, Gang Zhou, Yangxin Liu, En Deng and Zhenhong Jia

P2-45 Text & Document Recognition

MUGS: A Multiple Granularity Semi-Supervised Method for Text Recognition

Qi Song, Qianyi Jiang, Wang Lei, Lingling Zhao and Rui Zhang

P2-46 Text & Document Recognition

ColDBin: Cold Diffusion for Document Image Binarization

Saifullah Saifullah, Stefan Agne, Andreas Dengel and Sheraz Ahmed

P2-47 Text & Document Recognition

SAN: Structure-Aware Network for Complex and Long-tailed Chinese Text Recognition

Junyi Zhang, Chang Liu and Chun Yang

P2-48 Text & Document Recognition

End-to-end Multi-line License Plate Recognition with Cascaded Perception

Song-Lu Chen, Qi Liu, Feng Chen and Xu-Cheng Yin

P2-49 Text & Document Recognition

UTRNet: High-Resolution Urdu Text Recognition In Printed Documents

Abdur Rahman, Chetan Arora and Arjun Ghosh

P2-50 Text & Document Recognition

Combining OCR Models for Reading Early Modern Books

Mathias Seuret, Janne van der Loop, Nikolaus Weichselbaumer, Martin Mayr, Janina Molnar, Tatjana Hass and Vincent Christlein

P2-51 Competition

ICDAR 2023 Competition on Visual Question Answering on Business Document Images

Sachin Raja, Ajoy Mondal and C. V. Jawahar

P2-52 Competition

ICDAR 2023 Competition on Robust Layout Segmentation in Corporate Documents

Christoph Auer, Ahmed Nassar, Maksym Lysak, Michele Dolfi, Nikolaos Livathinos and Peter Staar

P2-53 Competition

ICDAR 2023 Competition on Structured Text Extraction from Visually-Rich Document Images

Wenwen Yu, Chengquan Zhang, Haoyu Cao, Wei Hua, Bohan Li, Huang Chen, Mingyu Liu, Mingrui Chen, Jianfeng Kuang, Mengjun Cheng, Yuning Du, Shikun Feng, Xiaoguang Hu, Pengyuan Lyu, Kun Yao, Yuechen Yu, Yuliang Liu, Wanxiang Che, Errui Ding, Cheng-Lin Liu, Jiebo Luo, Shuicheng Yan, Min Zhang, Dimosthenis Karatzas, Xing Sun, Jingdong Wang and Xiang Bai

P2-54 Competition

ICDAR 2023 Competition on Detection and Recognition of Greek Letters on Papyri

Mathias Seuret, Isabelle Marthot-Santaniello, Stephen A. White, Olga Serbaeva Saraogi, Selaudin Agolli, Guillaume Carrière, Dalia Rodriguez-Salas and Vincent Christlein

P2-55 Competition

ICDAR 2023 Competition on Recognition of Multi-line Handwritten Mathematical Expressions

Chenyang Gao, Yuliang Liu, Shiyu Yao, Jinfeng Bai, Xiang Bai, Lianwen Jin and Cheng-Lin Liu

P2-56 Competition

ICDAR 2023 Competition on Document Information Localization and Extraction

Stepan Simsa, Milan Sulc , Matyas Skalicky, Yash Patel, and Ahmed Hamdi

Doctoral Consortium · 23 & 24 August

Poster Session 1 and 2: 14:30 - 16:00

DC-1

Computer Vision Techniques for Handwritten Optical Music Recognition
Pau Torras

DC-2

Graph based deep learning research for recognition of on-line handwritten mathematical expression
Yejing Xie

DC-3

Strokes Trajectory Recovery for Unconstrained Handwritten Documents with Automatic Evaluation
Sidra Hanif

DC-4

Enabling Deep Document Image Analysis with Generative Models
Konstantina Nikolaidou

DC-5

Enhancing Information Extraction in Business Documents through Line-Level Analysis and Automation
Eliott Thomas

DC-6

Writer Retrieval for Historical Documents
Marco Peer

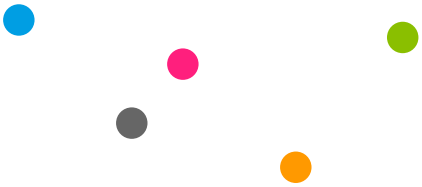
DC-7

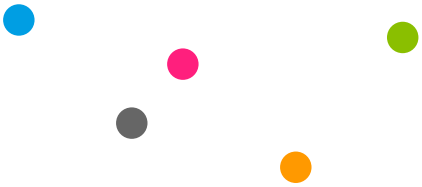
HTR for distant reading of medieval charters
Nicolas Renet

DC-8

Line-of-Sight Graph Attention and Graph-based Task Interaction (LGATI) for Visual Parsing of Math Formulas and Chemical Diagrams
Ayush Kumar Shah

Notes





Routes

San Francisco Airport (SFO) to San Jose Marriott

Caltrain ($10-18):

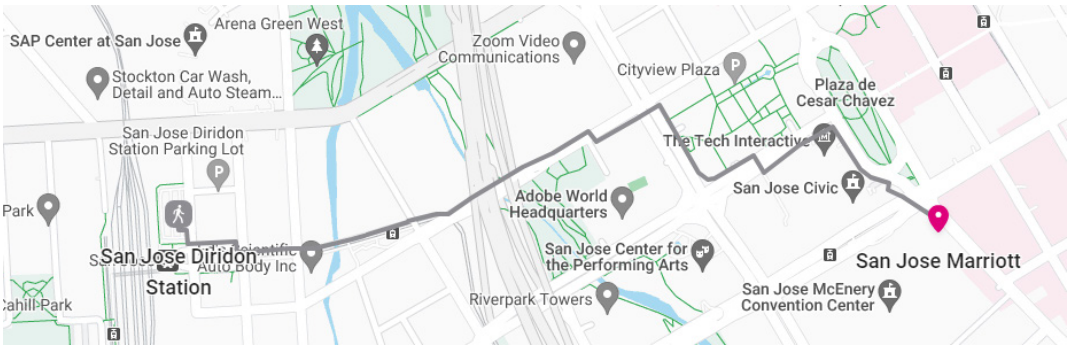
San Francisco Airport (SFO) to Millbrae
- Red-N towards Millbrae / SF / Richmond (4 min)

Millbrae Caltrain to San Jose Diridon
- L1 towards Tamien (1 hour 14 min)

San Jose Diridon to San Jose Marriott
- Walk (19 min)

Taxi ($200 - $250):

San Francisco Airport (SFO) to San Jose Marriott (40 min)



San Jose Airport (SJC) to San Jose Marriott

Metro ($2-6):

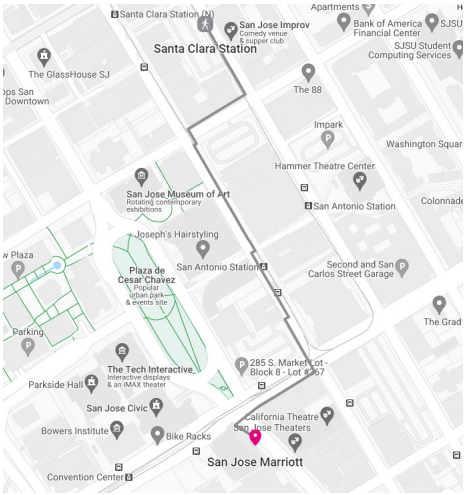
San Jose Airport Terminal A to Metro/Airport Station
- 60 Bus towards Milpitas BART via Airport (9 min)

Metro/Airport Station to Santa Clara Station
- Blue Line towards Santa Teresa (15 min)

Santa Clara Station to San Jose Marriott
- Walk (5 min)

Taxi ($20-25):

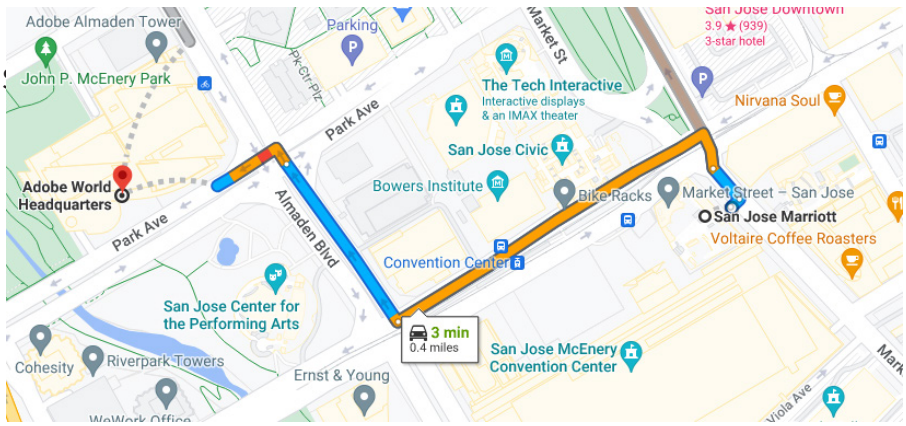
San Jose Airport to San Jose Marriott (8 min)



San Jose Marriott to Adobe World Headquarters

Walk (free):

Head northeast towards S Market St
Turn left onto S Market St
Turn left onto W San Carlos St
Turn right onto S Almaden Blvd
Turn left onto Park Ave
(3 min)



Colophon — Booklet design by Vlad Atanasiu · Logo typeface CPMono by Tino Meinert · Booklet typeface Fira Sans by Carrois Corporate & Edenspiekermann AG / The Mozilla Corporation

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