NTCIR

NII Testbeds and Community for Information access Research

Overview of NTCIR

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Tsinghua University

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NII Testbeds and Communities for Information access Research

Research Infrastructure for Evaluating Information Access

A series of evaluation designed to enhance research in information access technologies by providing an evaluation infrastructure: datasets, evaluation methodologies, and forum

Project started in late 1997

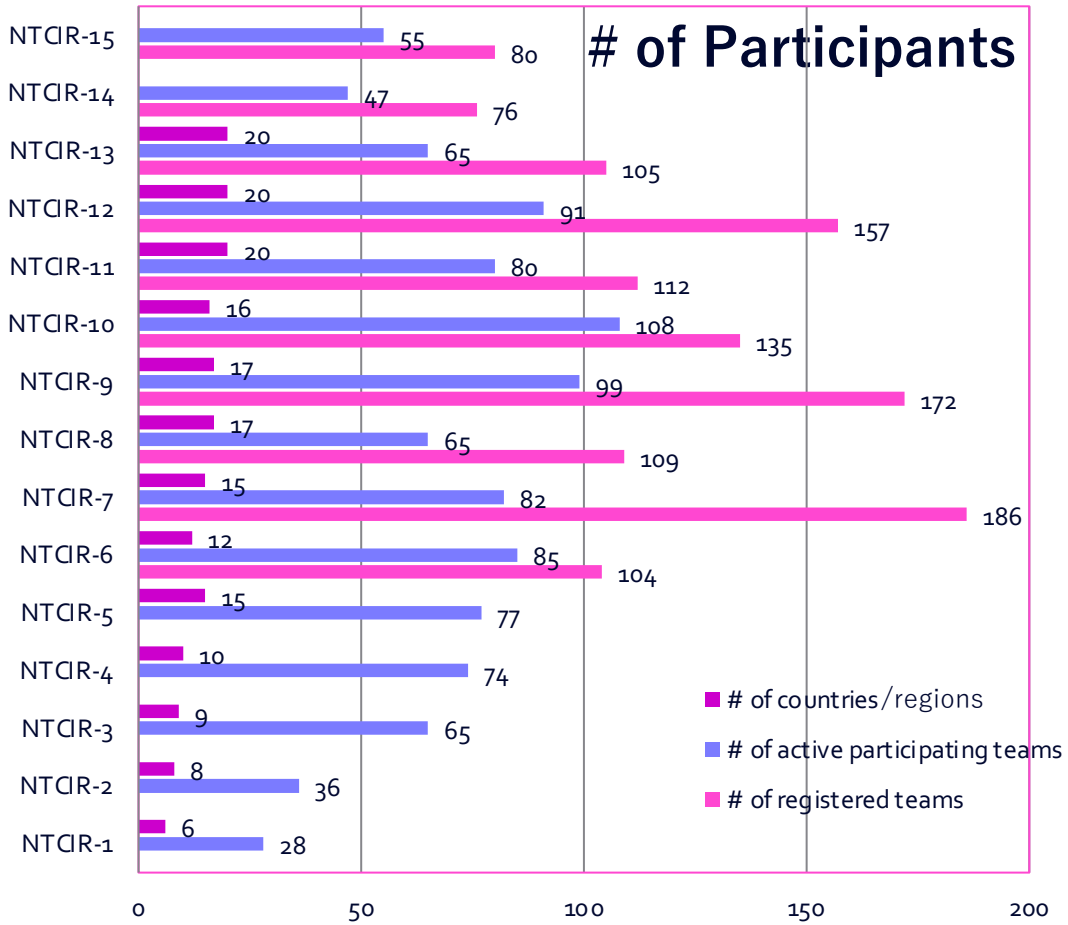
- 18 months cycle

Test collections

- Scientific, news, patents, web, CQA, Wikipedia, exams, spoken, microblogs, lifelogs
- Chinese, Korean, Japanese, and English

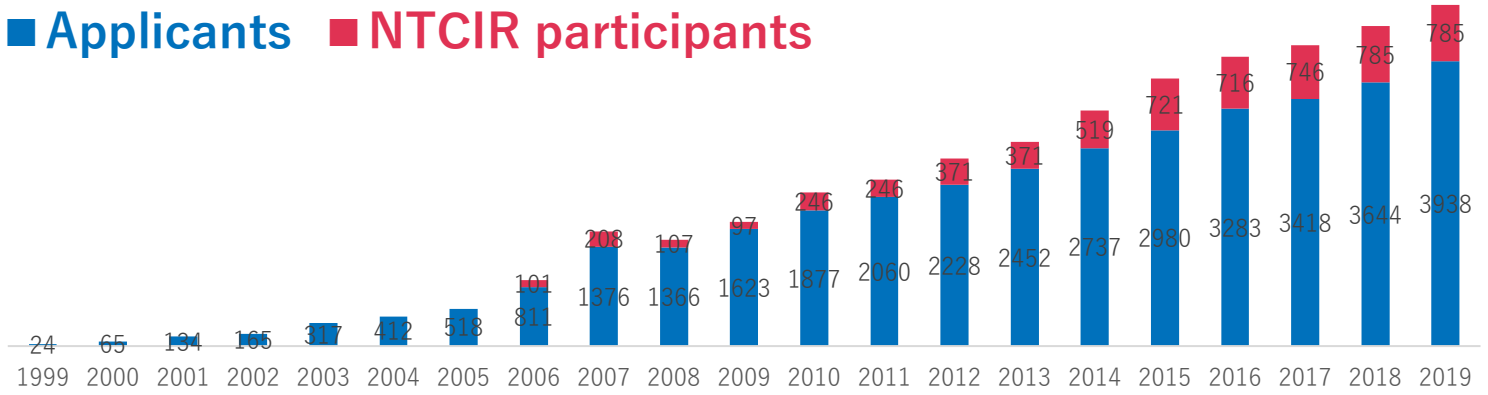
Tasks (Research areas)

- **IR**: cross-lingual, patents, web, geo, time, math, Spoken, recipe, microblogs, lifelogs, open data
- **QA**: monolingual, cross-lingual, interactive, IR for QA, complex, exams
- Summarization, trend info., patent maps, inference, 2-layer summarization for mobile, dialogue generation and evaluation
- Opinion analysis, text mining, intent mining, link discovery, information extraction, action detection



of NTCIR test collection users

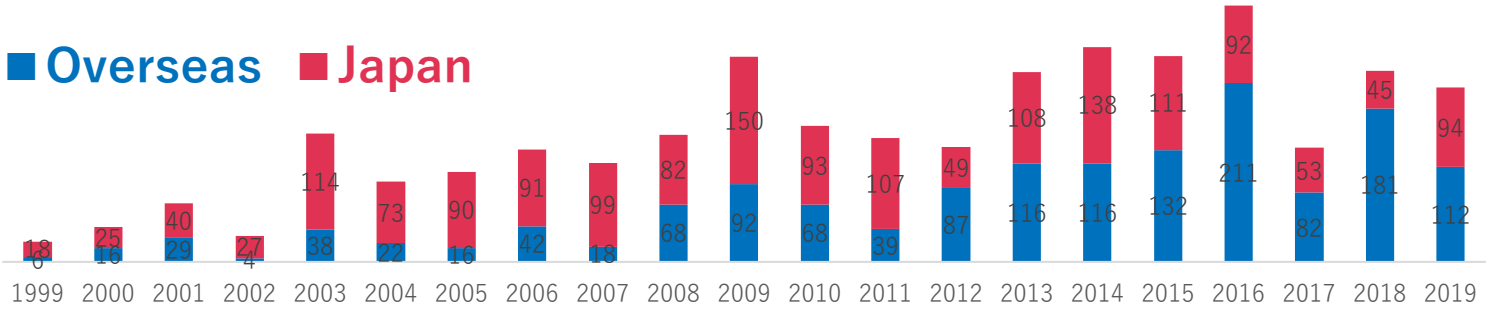
(= # of NTCIR participants + # of applicants for using the collections)



4,723

of applicants for using the collection

from Japanese and oversea institutes



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History of NTCIR

Year	1999	2001	2002	2004	2005	2007	2008	2010	2011	2013	2014	2016	2017	2019
Task/NTCIR round	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Automatic Term Recognition and Role Analysis (TMREC) (1)	9													
Ad hoc/Crosslingual IR (1) -> Chinese/English/Japanese IR (2) -> CLIR (3-6)	28	30	20	26	25	22								
Text Summarization Challenge (TSC) (2-4)		9	8	9										
Web Retrieval (WEB) (3-5)			7	11	7									
Question Answering Challenge (QAC) (3-6)			16	18	7	8								
Patent Retrieval [and Classification] (PATENT) (3-6)			10	10	13	12								
Multimodal Summarization for Trend Information (MUST) (5-7)					13	15	13							
Crosslingual Question Answering (CLQA) (5, 6) ->					14	12	19	14						
Advanced Crosslingual Information Access (ACLIA) (7, 8)														
Opinion (6) -> Multilingual Opinion Analysis (MOAT) (7, 8)						12	21	16						
Patent Mining (PAT-MN) (7, 8)							12	11						
Community Question Answering (CQA) (8)								4						
Geotemporal IR (GeoTime) (8, 9)								13	12					
Interactive Visual Exploration (Vis-Ex) (9)									4					
Patent Translation (PAT-MT)(7, 8) ->							15	8	21	21				
Patent Machine Translation (PatentMT)(9, 10)														
Crosslingual Link Discovery (Crosslink) (9, 10)									11	10				
INTENT(9, 10) -> Search Intent and Task Mining (IMine) (11, 12)									16	11	12	9		
One Click Access (1CLICK)(9, 10) -> Mobile Information Access (MobileClick) (11, 12)									4	8	4	11		
Recognizing Inference in Text (RITE)(9,10)									24	28	23			
-> Recognizing Inference in Text and Validation (RITE-VAL)(11)														
IR for Spoken Documents (SpokenDoc) (9, 10)									10	12	11	7		
-> Spoken Query and Spoken Document Retrieval (SpokenQuery&Doc) (11, 12)														
Mathematical Information Access (Math) (10, 11) -> MathIR (12)										6	8	6		
Medical Natural Language Processing (MedNLP) (10, 11) -> MedNLPDoc (12)										12	12	8		
-> MedWeb (13)													9	
QA Lab for Entrance Exam (QALab) (11, 12, 13)											11	12	11	13
-> QA Lab for Political Information (QALab-PoliInfo) (14)														
Temporal Information Access (Temporalia) (11, 12)											8	14		
Cooking Recipe Search (RecipeSearch) (11)											4			
Personal Lifelog Organisation & Retrieval (Lifelog) (12, 13, 14)												8	4	6
Short Text Conversation (STC) (12, 13, 14)												22	27	13
Open Live Test for Question Retrieval (OpenLiveQ) (13, 14)													7	4
Actionable Knowledge Graph (AKG) (13)													3	
Emotion Cause Analysis (ECA) (13)													3	
Neurally Augmented Image Labelling Strategies (NAILS) (13)													2	
We Want Web (WWW) (13, 14)													5	4
Fine-Grained Numeral Understanding in Financial Tweet (FinNum) (14)														6
CLEF/NTCIR/TREC REproducibility (CENTRE) (14)														1
	37	39	61	74	79	81	80	66	102	108	93	97	71	47

Tasks in NTCIR (1999 ~ 2008) NII Test Collection for Information Retrieval systems

Year	1999	2001	2002	2004	2005	2007	2008
Task/NTCIR round	1	2	3	4	5	6	7
Automatic Term Recognition and Role Analysis (TMREC) (1)							
Ad hoc/Crosslingual IR (1) -> Chinese/English/Japanese IR (2) -> CLIR (3-6)							
Text Summarization Challenge (TSC) (2-4)							
Web Retrieval (WEB) (3-5)							
Question Answering Challenge (QAC) (3-6)							
Patent Retrieval [and Classification] (PATENT) (3-6)							
Multimodal Summarization for Trend Information (MUST) (5-7)							13
Crosslingual Question Answering (CLQA) (5, 6) -> Advanced Crosslingual Information Access (ACLIA) (7, 8)							19
Opinion (6) -> Multilingual Opinion Analysis (MOAT) (7, 8)							21
Patent Mining (PAT-MN) (7, 8)							12

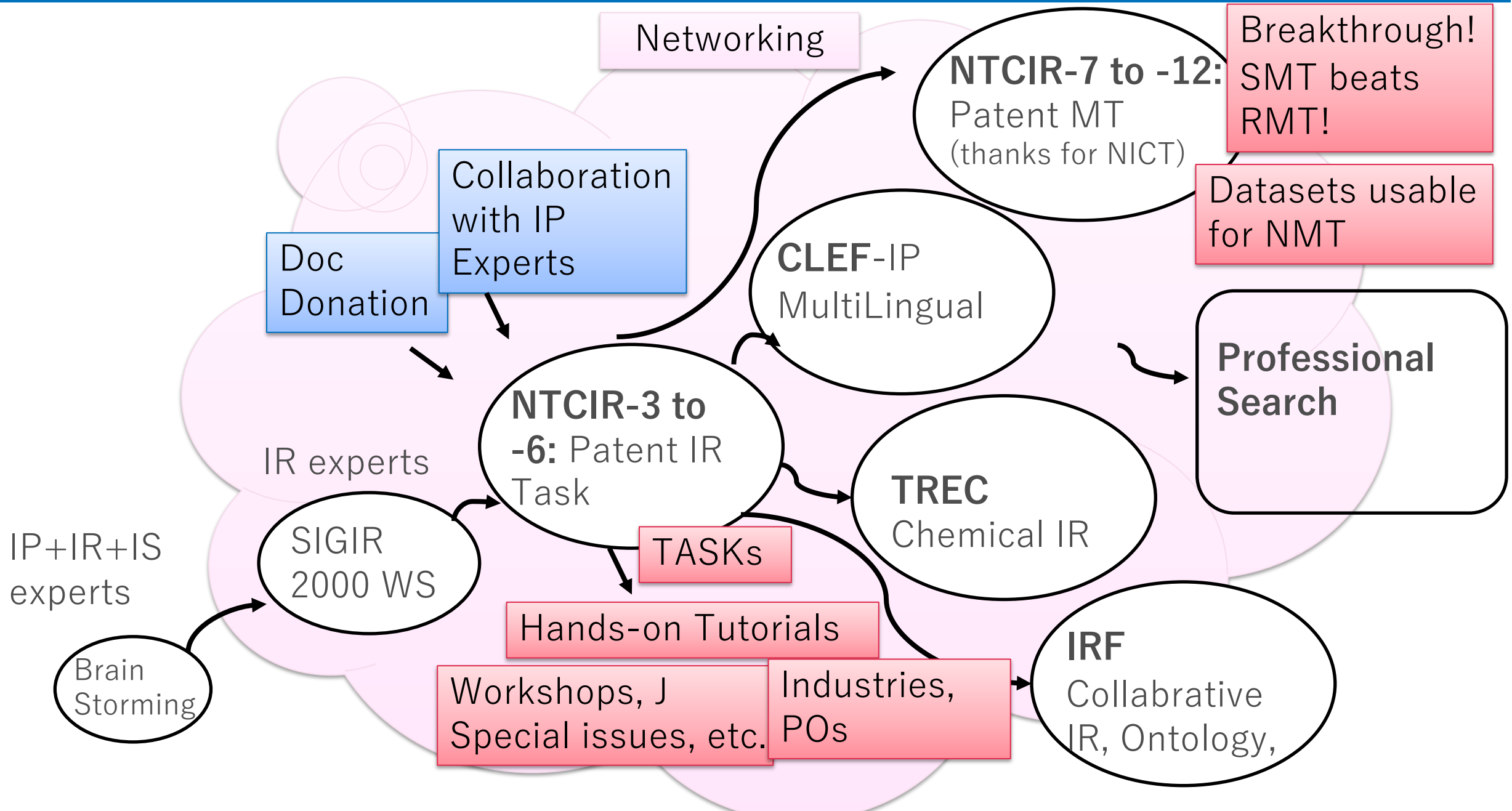
- **Cross lingual IR**
- **Text summarization**
- **Patent retrieval/mining**
- **QA**
- **Web search**
- **Opinion mining**

Tasks in NTCIR (2010 ~ 2019)

Year	2010	2011	2013	2014	2016	2017	2019
Task/NTCIR round						13	14
Crosslingual Link Discovery (Crosslink) (9, 10)							
INTENT(9, 10) -> **Search Intent and Task Mining** (IMine) (11, 12)							
One Click Access (1CLICK)(9, 10) -> **Mobile Information Access** (MobileClick) (11, 12)							
Recognizing Inference in Text (RITE)(9,10)							
-> Recognizing Inference in Text and Validation (RITE-VAL)(11)							
IR for Spoken Documents (SpokenDoc) (9, 10)							
-> Spoken Query and Spoken Document Retrieval (SpokenQuery&Doc) (11, 12)							
Mathematical Information Access (Math) (10, 11) -> MathIR (12)							
Medical Natural Language Processing (MedNLP) (10, 11) -> MedNLPDoc (12)							
-> MedWeb (13)						9	
QA Lab for Entrance Exam (QALab) (11, 12, 13)						11	13
-> QA Lab for Political Information (QALab-PoliInfo) (14)							
Temporal Information Access (Temporalia) (11, 12)							
Cooking Recipe Search (RecipeSearch) (11)							
Personal Lifelog Organisation & Retrieval (Lifelog) (12, 13, 14)						4	6
Short Text Conversation (STC) (12, 13, 14)						27	13
Open Live Test for Question Retrieval (OpenLiveQ) (13, 14)						7	4
Actionable Knowledge Graph (AKG) (13)						3	
Emotion Cause Analysis (ECA) (13)						3	
Neurally Augmented Image Labelling Strategies (NAILS) (13)						2	
We Want Web (WWW) (13, 14)						5	4
Fine-Grained Numeral Understanding in Financial Tweet (FinNum) (14)							6
CLEF/NTCIR/TREC REproducibility (CENTRE) (14)							1
						71	47

- Link discovery
- Search intent mining
- Mobile IR
- Text understanding
- Spoken IR
- IR for math
- Medical NLP
- Q&A for entrance exam
- Temporal IR
- IR for recipes
- IR for lifelogs
- Dialogue generation
- Online evaluation
- Knowledge graph
- Neural signal processing
- Web search (again)
- Numerical understanding
- Reproducibility

How a Task Has Been Evolved – An Example of Patent Retrieval



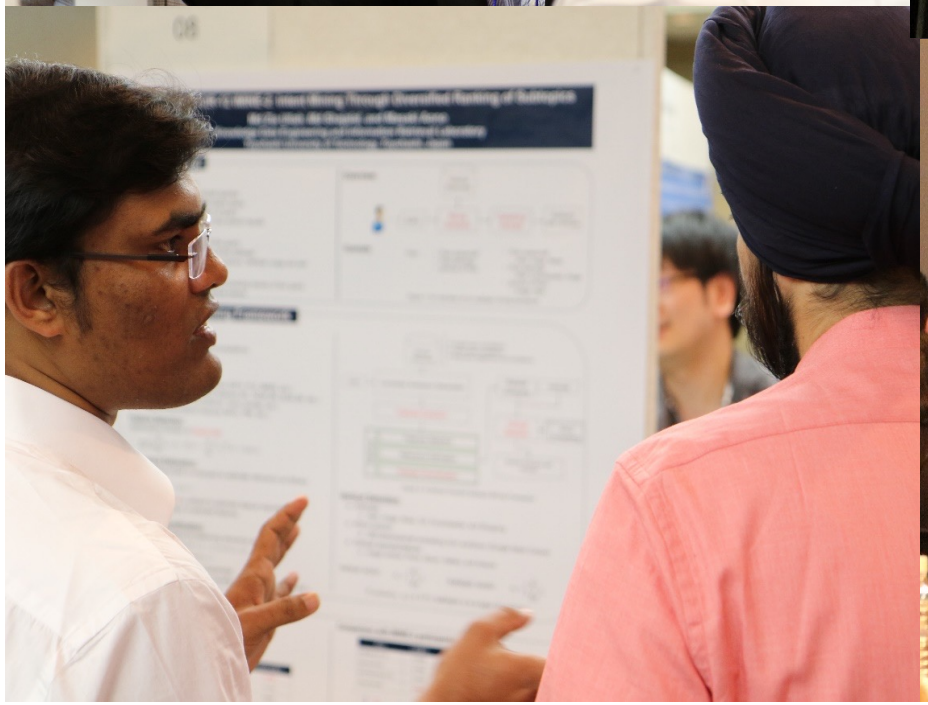
Why?

- Datasets / Users' Information Seeking Tasks
- Evaluation Methodology
- Reusable vs Reproducibility
- User-Centered Evaluation
- Experimental Platforms
- Open Advancement
- Advanced NLP → Knowledge- or Semantic-based
- Diversified IA Applications in the Real World
- Best Practice of Technologies
- → Best Practice of Evaluation Methodology
- Big Data (Documents + Behavior data)

Past NTCIR Conferences (Offline)

Past NTCIR Conferences (Offline)

Past NTCIR Conferences (Offline)



- 7 Evaluation Tasks
- 43 Task Organizers
- 57 = Papers in the NTCIR-15 proceedings
- 193 = Authors
- **270 Participants (as of Dec 11)**

References:

NTCIR 10, June 2013: 208

NTCIR 11, Dec 2014: 199

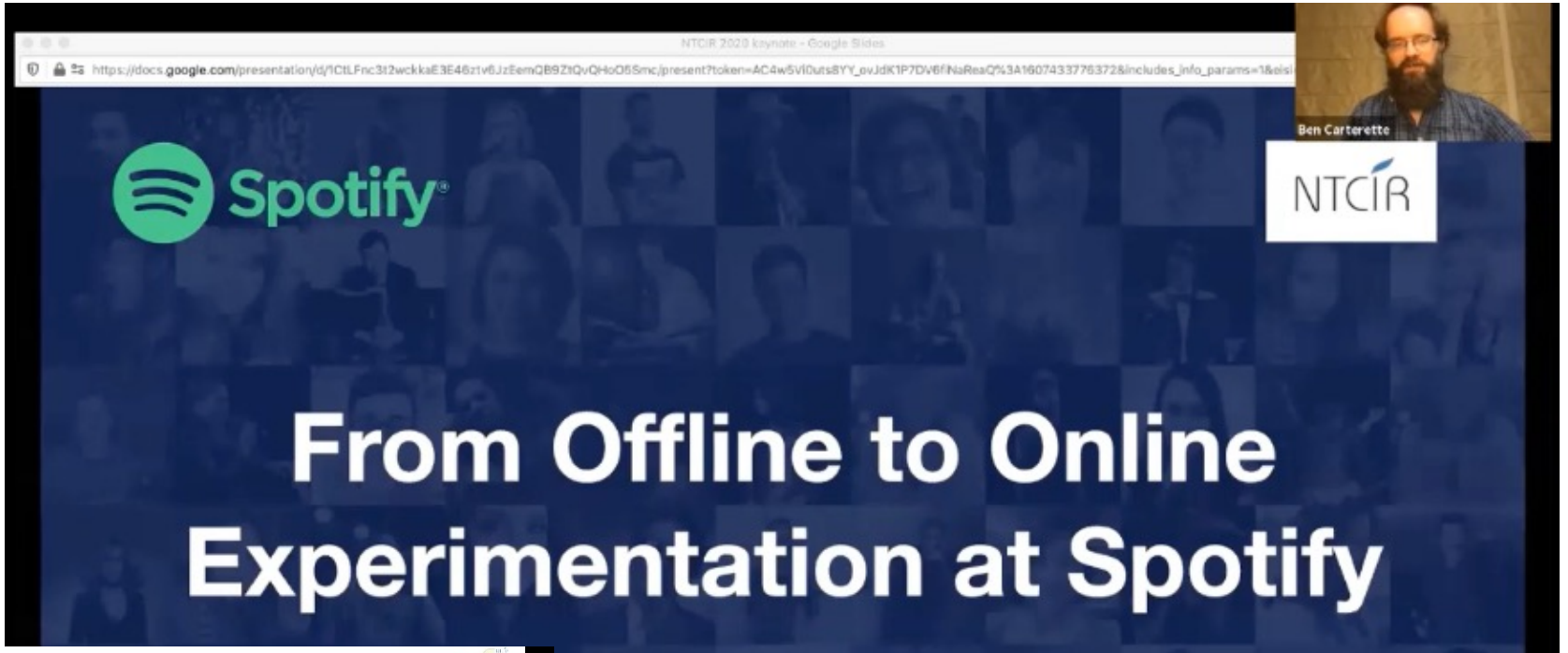
NTCIR 12, June 2016: 245

NTCIR 13, Dec 2017: 203

NTCIR 14, June 2019: 160

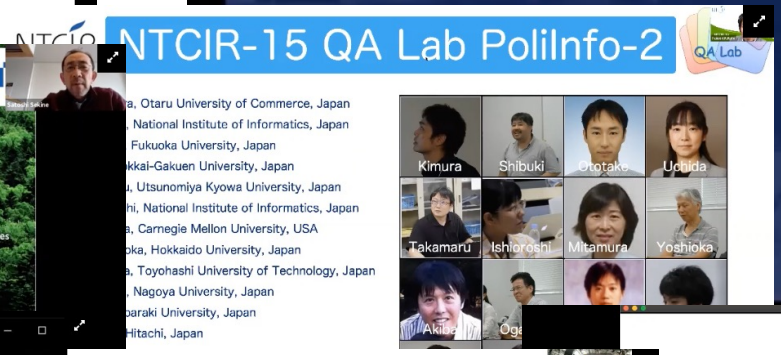
- **CORE TASKS**
  1. **DialEval-1**: Dialogue Evaluation
  2. **FinNum-2**: Numeral Attachment in Financial Tweets
  3. **QA Lab-PoliInfo-2**: Question Answering Lab for Political Information
  4. **SHINRA2020-ML**: SHINRA 2020 Multi-lingual
  5. **WWW-3**: We Want Web with CENTRE
- **PILOT TASKS**
  6. **Data Search**: Data Search
  7. **MART**: Micro Activity Retrieval Task

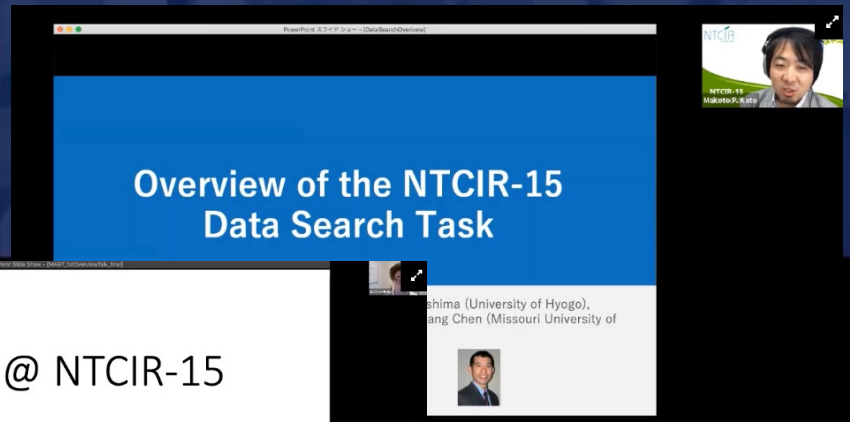

NTCIR
NII Testbeds and Community for Information access Research
8-11 DEC, 2020
Welcome!
NTCIR-15 Conference
Charles L. A. Clarke
University of Waterloo
Noriko Kando
National Institute of Informatics

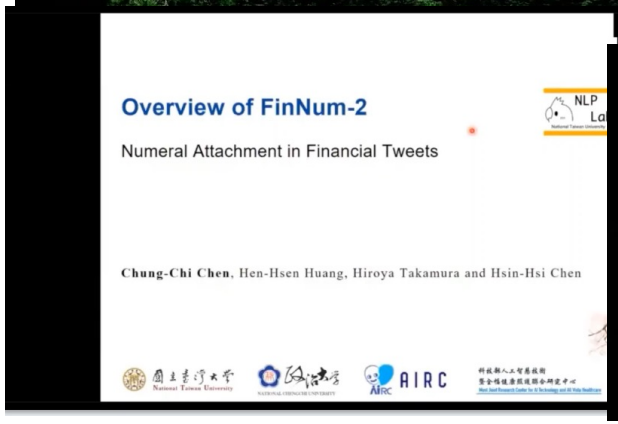

Spotify
Ben Carterette
NTCIR
From Offline to Online Experimentation at Spotify

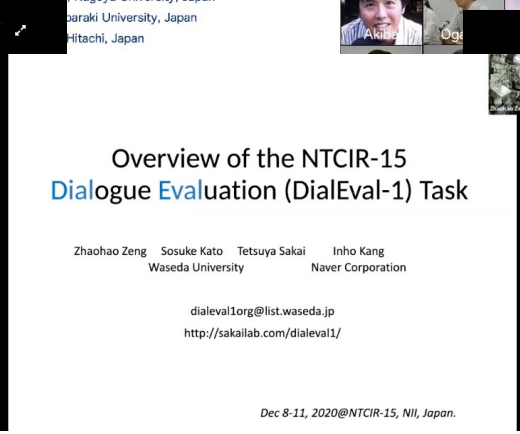

Overview of NTCIR-15
Makoto P. Kato
University of Tsukuba
Yiqun Liu
Tsinghua University

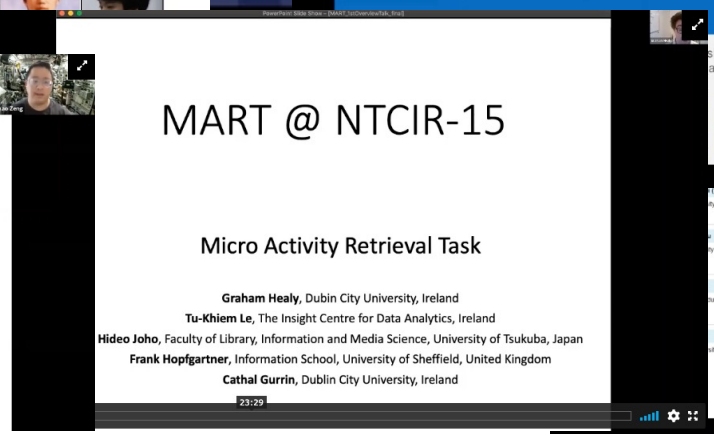

SHINRA2020-ML
Categorizing 30 language Wikipedia into Extended Named Entity categories
森羅
SHINRA
Structured Knowledge, built on Wikipedia and Extended Named Entities
Center for Advanced Intelligence Project, Riken, Japan

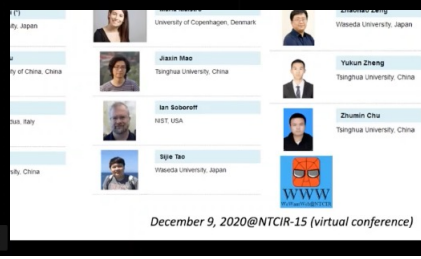

NTCIR-15 QA Lab PoliInfo-2
QA Lab
Otaru University of Commerce, Japan
National Institute of Informatics, Japan
Fukuoka University, Japan
Utsunomiya Kyowa University, Japan
Carnegie Mellon University, USA
Hokkaido University, Japan
Toyohashi University of Technology, Japan
Nagoya University, Japan
Hitachi, Japan
Kimura
Shibuki
Ototake
Uchida
Takamaru
Ishioroshi
Mitamura
Yoshioka

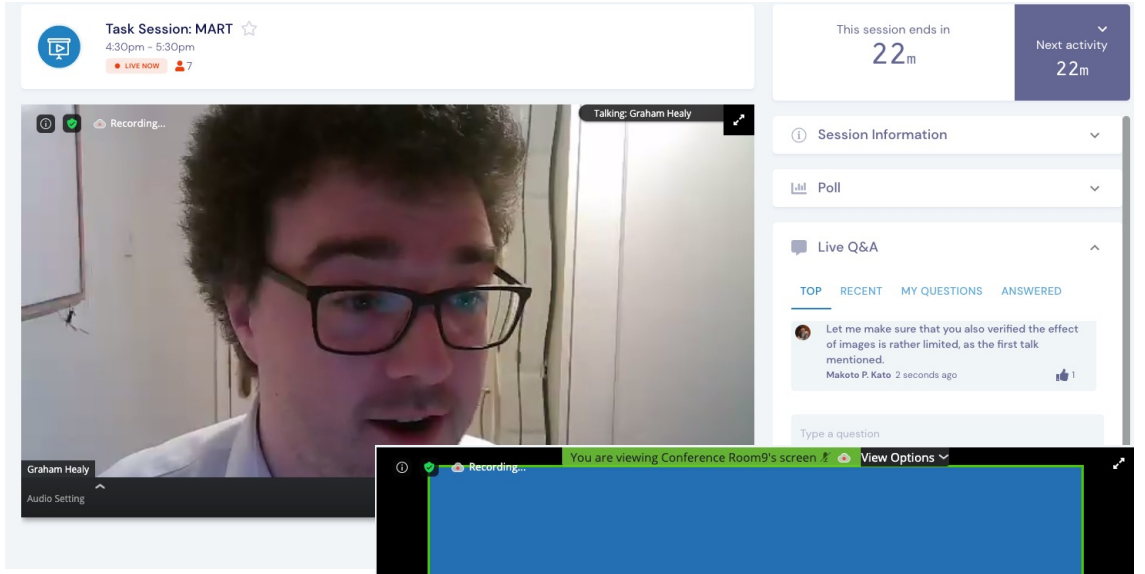

Overview of the NTCIR-15
Data Search Task

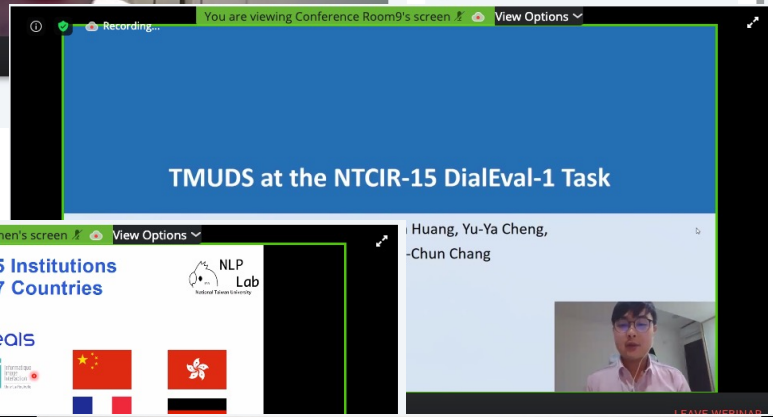

Overview of FinNum-2
Numeral Attachment in Financial Tweets
Chung-Chi Chen, Hen-Hsen Huang, Hiroya Takamura and Hsin-Hsi Chen
AIRC

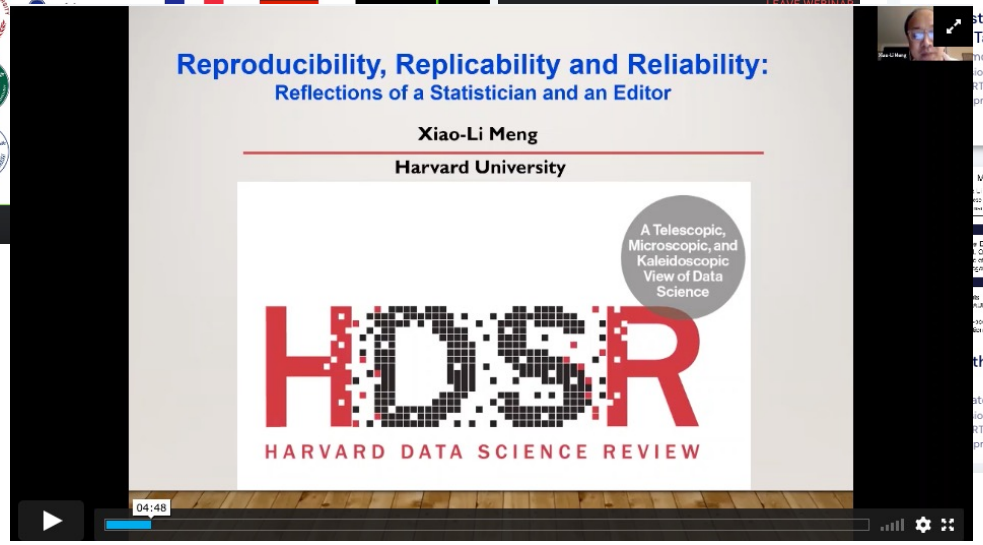

Overview of the NTCIR-15
Dialogue Evaluation (DialEval-1) Task
Zhaohao Zeng
Sosuke Kato
Tetsuya Sakai
Waseda University
Inho Kang
Naver Corporation
dialeval1org@list.waseda.jp
http://sakailab.com/dialeval1/
Dec 8-11, 2020@NTCIR-15, NII, Japan.

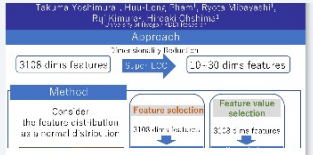

MART @ NTCIR-15
Micro Activity Retrieval Task
Graham Healy, Dubin City University, Ireland
Tu-Khiem Le, The Insight Centre for Data Analytics, Ireland
Hideo Joho, Faculty of Library, Information and Media Science, University of Tsukuba, Japan
Frank Hopfgartner, Information School, University of Sheffield, United Kingdom
Cathal Gurrin, Dublin City University, Ireland
23:29


December 9, 2020@NTCIR-15 (virtual conference)



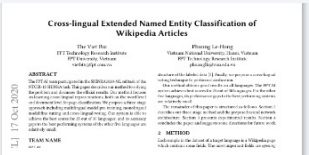




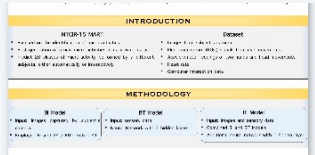


Behavioral Classification Using Feature Selection in the Micro Activity Retrieval Task
Takuma Yoshimura
Poster Session (WWW-3, SHINRA2020-ML, Data Search, MART)
Today 6:00pm - 7:30pm

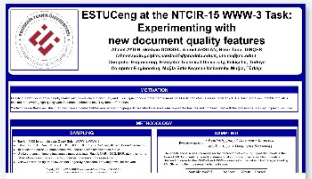
CYUT at the NTCIR-15 FinNum-2 Task: Tokenization and Fine-tuning Techniques for Numeral Attachment in Financial Tweets
Mike Tian-Jian Jiang
Poster Session - (QA Lab-PoliInfo-2, FinNum, DialEval-1)
Tomorrow 3:00pm - 4:30pm



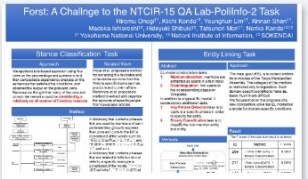
Cross-lingual Extended Named Entity Classification of Wikipedia Articles
The Viet Bui
Poster Session (WWW-3, SHINRA2020-ML, Data Search, MART)
Today 6:00pm - 7:30pm



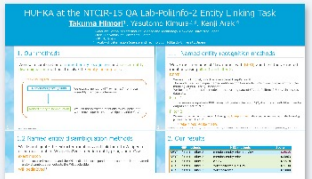
DCU team at the NTCIR-15 Micro-Activity Retrieval Task
Tu-Khiem Le
Poster Session (WWW-3, SHINRA2020-ML, Data Search, MART)
Today 6:00pm - 7:30pm



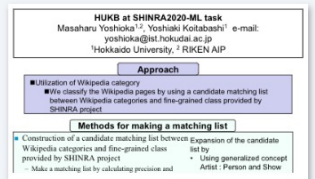
ESTUCeng at the NTCIR-15: Experimenting with new document quality features
Ahmet Aydin
Poster Session (WWW-3, SHINRA2020-ML, Data Search, MART)
Today 6:00pm - 7:30pm



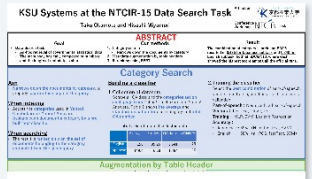
Forst: A Challenge to the NTCIR-15 QA Lab-PoliInfo-2 Task
Hiromu Onogi
Poster Session - (QA Lab-PoliInfo-2, FinNum, DialEval-1)
Tomorrow 3:00pm - 4:30pm



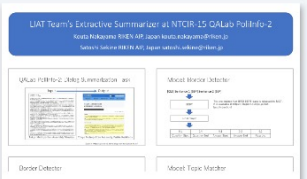
HUHKA at the NTCIR-15 QA Lab-PoliInfo-2 Entity Linking Task
Takuma Himori
Poster Session - (QA Lab-PoliInfo-2, FinNum, DialEval-1)
Tomorrow 3:00pm - 4:30pm



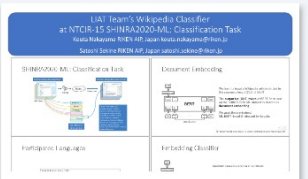
HUKB at SHINRA2020-ML task
Masaharu Yoshioka
Poster Session (WWW-3, SHINRA2020-ML, Data Search, MART)
Today 6:00pm - 7:30pm



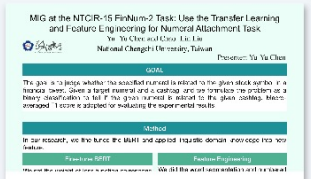
stems at the NTCIR-15 Data Task
noto
on (WWW-3, SHINRA2020-ML, Data RT)
pm - 7:30pm



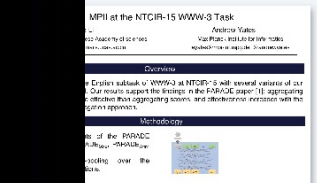
LIAT Team's Extractive Summarizer at NTCIR-15 QALab PoliInfo-2
Kouta Nakayama
Poster Session - (QA Lab-PoliInfo-2, FinNum, DialEval-1)
Tomorrow 3:00pm - 4:30pm



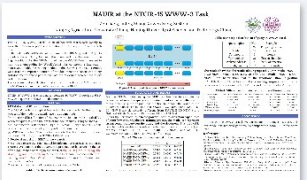
LIAT Team's Wikipedia Classifier at NTCIR-15 SHINRA2020-ML: Classification Task
Kouta Nakayama
Poster Session (WWW-3, SHINRA2020-ML, Data Search, MART)
Today 6:00pm - 7:30pm



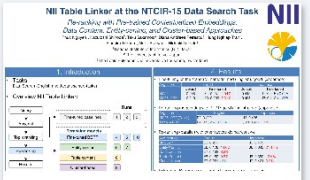
MIG at NTCIR-15: Use the transfer learning and feature engineering for the FinNum-2 task
Yu-Yu Chen
Poster Session - (QA Lab-PoliInfo-2, FinNum, DialEval-1)
Tomorrow 3:00pm - 4:30pm



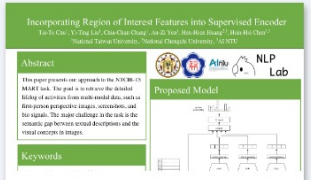
the NTCIR-15 WWW-3 Task
on (WWW-3, SHINRA2020-ML, Data RT)
pm - 7:30pm



NAUIR at the NTCIR-15 WWW-3 Task
Zhu Liang
Poster Session (WWW-3, SHINRA2020-ML, Data Search, MART)
Today 6:00pm - 7:30pm



NII Table Linker at the NTCIR-15 Data Search Task: Re-ranking with Pre-trained Contextualized Embeddings, Data Content, Entity-centric, and Cluster-based approaches



NLP301 at the NTCIR-15 Micro-activity Retrieval Task: Incorporating Region of Interest Features into Supervised Encoder
Tai-Te Chu

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