All times are in UTC/GMT+4

ACLing 2024: 6th International Conference on AI in Computational Linguistics
21st-22nd September 2024
https://ACLing.org

ACLing 2024 Conference Program

Day 1: Saturday day 21-09-2024		
08:30 – 09: 30 AM Registration		
9:30 – 10:00 AM Opening and Welcome Messages (Auditorium/Main Hall)		
10:10 – 11:40 AM Keynote speech (Auditorium/Main Hall)		
11:40 – 12:00 PM Break		
Presentations will be 20 mins including questions		
Parallel Sessions 1 & 2	21-09-2024 12:00 – 1:20 PM	
	Hall 1 (Session 1)	**Hall 2 (Session 2)**
	Transformer based models	**Applying LLMs on Arabic**
	4 papers	4 papers
1:20 – 1:45 PM Break		
Parallel Sessions 3 & 4	21-09-2024 1:45 – 3:05 PM	
	Hall 1 (Session 3)	**Hall 2 (Session 4)**
	Applications of LLMs in Diverse Domains	**Technical Issues in LLMS and their applications**
	4 papers	4 papers
3:05 – 4:10 PM Lunch Break		
Parallel Sessions 5 & 6	21-09-2024 4:10 – 5:30 PM	
	Hall 1 (Session 5)	**Hall 2 (Session 6)**
	Spam and Hate Speech Detection	**Fake news and Fraud detection**
	4 papers	4 papers
5:30 – 6:00 PM Networking/Break		
Day 2: Sunday 22-09-2024		
Parallel Sessions 1 & 2	22-09-2024 10:00– 11: 20 AM	
	Hall 1 (Session 1)	**Hall 2 (Session 2)**
	Arabic Text Recognition and Sentiment Analysis	**Arabic Natural Language Processing Tools**
	4 papers	4 papers
11:20 – 11:40 AM Break		
Parallel Sessions 3 & 4	22-09-2024 11:40– 1: 00 PM	
	Hall 1 (Session 3)	**Hall 2 (Session 4)**
	Language-Specific LLM Issues and Applications	**Arabic Natural Language Processing (I)**
	4 papers	3 papers

Parallel Sessions 5 & 6	1:00 – 1:20 PM break	
	22-09-2024 1:20– 3: 00 PM	
	Hall 1 (Session 5)	Hall 2 (Session 6)
	Arabic Natural Language Processing (II)	Arabic Natural Language Processing (I)
	5 papers	5 papers
	3:00 – 4:00 PM Lunch Break	
	Session 7- 4:00– 5:20 PM	
	Hall 1 (Session 7)	
	Sentiment Analysis	
	4 papers	
	22-09-2024 05:10 – 05:30 PM Awarding and Closing Ceremony	

Day 1: Saturday day 21-09-2024
08:30 - 9:30 AM Registration

Opening and Welcome Messages 9:30 – 10:00 AM

Professor Dr. Abdullah Alshamsi, Vice Chancellor, The British University in Dubai, UAE

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Professor Dr. Khalid Al Marri, Dean of Research, The British University in Dubai, UAE

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Professor Dr. Khaled Shaalan, ACLing2021 Conference Co-Chair, The British University in Dubai, UAE
Professor Dr. Samhaa R. El-Beltagy, ACLing2021 Conference Co-Chair, Newgiza University, Egypt

Presentations will be 20 mins including questions

Keynote speech 10:10 – 11:40 AM

Professor Dr. Iyad Rahwan

Director of the Max Planck Institute for Human Development in Berlin, Germany

Opportunities at the Intersection of AI And Behavioral Science

11:40 – 12:00 PM Break

Parallel Sessions 1 and 2

Parallel Session (1): 12:00 – 1:20 PM
Topic: Transformer based models
Location: Hall 1
Chair: Professor Dr. Khaled Shaalan

- #30: **Fused Transformers: Fused Information of Arabic long Article for Summarization**
  <u>Zeyad Ezzat</u>, Ayman Khalafallah and Ghada Khoriba **(Remote)**
- #34: **Semantic-Driven Topic Modeling Using Transformer-Based Embeddings and Clustering Algorithms**
  <u>Melkamu Abay Mersha</u>, Mesay Gemeda Yigezu and Jugal Kalita **(Remote)**
- #70: **Leveraging Transformer Summarizer to Extract Sentences for Arabic Text Summarization**
  <u>Hoda Zaiton</u>, Amany Fashwan and Sameh Alansary **(In Person)**
- #20: **Arabic Idioms Detection by Utilizing Deep Learning and Transformer-based Models**
  <u>Hanen Himdi</u> **(In Person)**

Parallel Session (2): 12:00 – 1:20 PM
Topic: Applying LLMs on Arabic
Location: Hall 2
Chair: Professor Dr. Samhaa R. El-Beltagy

- #28: **Mathematical Problem Solving in Arabic: Assessing Large Language Models**
  <u>Abeer Mahgoub</u>, Ghada Khoriba and Elhassan Elsabry **(Remote)**
- #33: **ArzEn-LLM: Code-Switched Egyptian Arabic-English Translation and Speech Recognition Using LLMs**
  <u>Ahmed Heakl</u>, Youssef Zaghloul, Mennatullah Ali, Rania Hossam and Walid Gomaa **(Remote)**
- #26: **Multi-Hop Arabic LLM Reasoning in Complex QA**
  <u>Hazem Abdelazim</u> **(Remote)**
- #58: **Exploring Retrieval Augmented Generation in Arabic**
  <u>Samhaa R. El-Beltagy</u> and Mohamed A. Abdallah **(In Person)**

1:20 – 1:45 PM Break

Parallel Sessions 3 and 4

Parallel Session (3): 1:45 – 3:05 PM
Topic: Applications of LLMs in Diverse Domains
Location Professor: Hall 1
Chair: Professor Dr. Samhaa R. El-Beltagy

- **Invited talk**: ALECSO SCIENCE GATE
  Amine Dahmani (In Person)
- #39: **ResuméAtlas: Revisiting Resume Classification with Large-Scale Datasets and Large Language Models**

Ahmed Heakl, Youssef Mohamed, Noran Mohamed, Aly Elsharkawy and Ahmed Zaky **(Remote)**

- #60: **Empathetic Language in LLMs under Prompt Engineering: A Comparative Study in the Legal Field**
  Yifan Zhang, **Christopher Rashidian**, Sabine Brunswicker, Dan Whitenack and Daniel Linna **(Remote)**

- #83: **Using LLMs and ontologies to extract causal relationships from medical abstracts**
  Alexandru Lecu, Adrian Groza and Lezan Hawizy **(In Person)**

Parallel Session (4): 1:45 – 3:05 PM
Topic: Technical Issues in LLMS and their applications
Location: Hall 2
Chair: Professor Dr. Khaled Shaalan

- #80: **Context-biased vs. structure-biased disambiguation of relative clauses in large language models**
  Elsayed Issa and Noureddine Atouf **(Remote)**

- #65: **Up To Date: Automatic Updating Knowledge Graphs Using LLMs**
  Shahenda Hatem, Ghada Khoriba, Mohamed H. Gad-Elrab and Mohamed Elhelw **(Remote)**

- #48: **Arabic NER Evaluation: Pre-Trained Models via Contrastive Learning vs. LLM Few-Shot Prompting**
  Passant Elchafei and Amany Fashwan **(In Person)**

- # 49: **Utilizing GPT to Enhance Text Summarization: A Strategy to Minimize Hallucinations**
  Hassan Shakil, Zeydy Ortiz, Grant C. Forbes and Jugal Kalita **(Remote)**

3:05 – 4:10 PM Lunch Break

Parallel Sessions 5 and 6

Parallel Session (5): 4:10 – 5:30 PM
Topic: Spam and Hate Speech Detection
Location: Hall 1
Chair: Professor Dr. Samhaa R. El-Beltagy

- #54: **Deep Learning Approaches for Detecting Arabic Cyberbullying Social Media**
  Manar Alkhatib, Ashwaq Faisal, Khaled Shaalan, Azza Abdel Monem and Faris Alfalasi **(Remote)**

- #40: **Hate Speech Detection in Arabic Text: Survey**
  Rehab Ghaly, Abeer Elkorany and Cherry A. Ezzat **(Remote)**

- # 51: **A Novel Approach for Arabic SMS Spam Detection Using Hybrid Deep Learning Techniques**
  Mohammed Rasol Al Saidat, Khaled Shaalan and Suleiman Yerima **(Remote)**

- #50: **Advancements of SMS Spam Detection: A Comprehensive Survey of NLP and ML Techniques**
  Mohammed Rasol Al Saidat, Khaled Shaalan and Suleiman Yerima **(Remote)**

Parallel Session (6): 4:10 – 5:30 PM
Topic: Fake news and Fraud detection
Location: Hall 2
Chair: Professor Dr. Khaled Shaalan

- # 35: **Ethio-Fake: Cutting-Edge Approaches to Combat Fake News in Under-Resourced Languages Using Explainable AI**
  Mesay Gemeda Yigezu, Melkamu Abay Mersha, Girma Yohannis Bade, Jugal Kalita, Olga Kolesnikova and Alexander Gelbukh **(Remote)**
- #14 **Fraud Detection in Medical Insurance Claims Using Majority Voting of Multiple Unsupervised Algorithms**
  Mohamed Abo El-Enen, Dina Tbaishat, **Ahmed Sahlol**, Amril Nazir, Khalid Almaymuni, Mustafa Abdulrazek, Reem Muhammad, Fatima Adlan and Ravi Sharma **(Remote)**
- #77: **FASSILA: A Corpus for Algerian Dialect Fake News Detection and Sentiment Analysis**
  Mohamed Amine Cheragui, Abdelhalim Hafedh Dahou, Amin Abdedaiem and Brigitte Mathiak **(Remote)**
- # 68: **Enhancing Model Performance through Translation-based Data Augmentation in the context of Fake News Detection**
  Mohamed Amine Cheragui, **Abdelhalim Hafedh Dahou**, Amin Abdedaiem and Brigitte Mathiak **(Remote)**

5:30 – 6:00 PM
Networking

Day 2: Sunday 22-09-2024
Parallel Sessions 1 and 2

Parallel Session (1): 10:00 AM – 11:20 AM
Topic: Arabic Text Recognition and Sentiment Analysis
Location: Hall 1
Chair: Professor Dr. Khaled Shaalan

- #25: **Deep Learning for Accurate Recognition of Arabic Handwritten Words in Historical Documents**
  <u>Hakim Bouchal</u> and Ahror Belaid **(Remote)**
- #27: **Expression of Depression Among Arab Twitter Users Using Arabic Corpus Analysis**
  Ahd Mohamed and <u>Wajdi Zaghouani</u> **(Remote)**
- #36: **Empirical Analysis for Detecting Arabic Online Suicidal Ideation**
  Hind Alatawi, <u>Shadi Abudalfa</u> and Hamzah Luqman
- #45: **A-MASA: Arabic Multidomain Aspect-Based Sentiment Analysis Datasets**
  <u>Yomna Eid</u>, Walaa Medhat and Hala Zayed **(Remote)**

Parallel Session (2): 10:00 AM – 11:20 AM
Topic: Arabic Natural Language Processing Tools
Location: Hall 2
Chair: Professor Dr. Samhaa R. El-Beltagy

- **Invited talk: Alkhalil platform for Arabic NLP tools**
  Azzeddine Mazroui
- #76: **SinaTools: Open Source Toolkit for Arabic Natural Language Processing**
  <u>Tymaa Hammouda</u>, Mustafa Jarrar and Mohammed Khalilia **(Remote)**
- #42: **Takween: A Comprehensive Arabic Collection and Annotation Tool**
  Iyad Elwy and <u>Caroline Sabty</u> **(In Person)**
- #41: **A morphological word embedding for Arabic language**
  <u>Abdelouahab Masbah</u>, Nabil Ababou and Azzeddine Mazroui **(Remote)**

11:20 – 11:40 AM break
Parallel Sessions 3 and 4

Parallel Session (3): 11:40 – 1:00 PM
Topic: Language-Specific LLM Issues and Applications
Location: Hall 1
Chair: Professor Dr. Khaled Shaalan

- #46: **Exploring Explainability in Arabic Language Models: An Empirical Analysis of Techniques**
  Yousra Chahinez Hadj Azzem, Fouzi Harrag and Ladjel Bellatreche **(Remote)**
- # 57: **Normalizing Swiss German Dialects with the Power of Large Language Models**
  Mihael Kresic and Noorhan Abbas **(Remote)**
- #44: **Co-reference Resolution in Prompt Engineering**
  Mridusmita Das and Apurbalal Senapati **(Remote)**
- #71: **Evaluating Large Language Models for Arabic Sentiment Analysis: A Comparative Study Using Retrieval-Augmented Generation**
  Salma Khaled, Ensaf Hussein and Walaa Medhat **(Remote)**

Parallel Session (4): 11:40 – 12:40 PM
Topic: Arabic Natural Language Processing (I)
Location: Hall 2
Chair: Professor Dr. Samhaa El-Beltagy

- # 67: **Enhancing Visual Question Answering for Arabic Language Using LLaVa and Reinforcement Learning**
  Asmaa Elmaghraby, Samaa Maged, Ghada Khoriba, Rawan Elfaramawy, Mohamed Essawey and Esraa Negm **(Remote)**
- #73: **Text correction for modern standard Arabic**
  Ahmad Abdelaal, Abdelrahman Ahmed Medhat, Mohamed Elsayad, Muhammed Fouad, **Salma Khaled**, Ahmed Tamer and Walaa Medhat **(Remote)**
- # 75: **Alma: Fast Lemmatizer and POS Tagger for Arabic**
  Mustafa Jarrar, Diyam Akra and Tymaa Hammouda **(Remote)**

1:00 – 1:20 PM break

Parallel Sessions 5 and 6

Parallel Session (5): 1:20 –3:00 PM
Topic: Arabic Natural Language Processing (II)
Location: Hall 1
Chair: Professor Dr. Khaled Shaalan

- #79: **A novel perspective using Chaotic-Grey Wolf Optimization Algorithm for Arabic Feature Selection Problem**
  Hadni Meryeme, Hjiaj Hassane, Gouiouez Mounir and **Meryem Amane (Remote)**
- # 82: **Poems, Pulses and Polygons: How Classical Arabic Poetry Resonates with Music and Geometry**
  Mohamad Elzohbi and Richard Zhao **(Remote)**
- # 84: **Arabic Historical Documents Layout Analysis using Mask RCNN**
  Latifa Al-Jiffry, Hassanin Al-Barhamtoshy, Felwa Abukhodair and Amani Jamal
- #85: **Deep Learning Techniques for Identifying Poets in Arabic Poetry: A Focus on LSTM and Bi-LSTM**
  Hamza Shoubaki, Sherief Abdallah, Khaled Shaalan **(Remote)**
- #62: **English to Arabic Braille Neural Machine Translation Through Corpus Augmentation**
  Nisheeth Joshi, Pragya Katyayan and Syed Afroz Ahmed **(Remote)**

Parallel Session (6): 1:20 – 3:00 PM

Topic: Natural Language analysis and linguistic resources

Location: Hall 2

Chair: Professor Dr. Samhaa El-Beltagy

- #21: **Oxymoron: An Automatic Detection from the Corpus**
  Apurbalal Senapati **(In Person)**
- #31: **Word Level Language Identification in Indonesian-Javanese-English Code-Mixed Text**
  <u>Ahmad Fathan Hidayatullah</u>, Rosyzie Anna Apong, Daphne Teck Ching Lai and Atika Qazi **(Remote)**
- #38 **Paraphrasing identification Using ACV-tree kernel**
  <u>Marwah Alian</u> **(In Person)**
- #52 **Lexicon-based Language Relatedness Analysis**
  <u>Girma Yohannis Bade</u>, Olga Kolesnikova and José Luis Oropeza **(Remote)**
- # 78 **Automatic Abstracting For Bibliographic Record Semantic Enrichment**
  Nassreddine Znaidi, <u>Amel Fraisse</u> and Fadoua Ouamani **(In Person)**

3:00 – 4:00 PM Lunch Break

Session (7): 4:00 PM – 5:20 PM

Topic: Sentiment Analysis

Location: Main Hall

Chair: Professor Dr. Khaled Shaalan

- #9: **Improving sentiment analysis of financial news headlines using hybrid Word2Vec-TFIDF feature extraction technique**
  <u>Meera George</u> and R Murugesan **(In Person)**
- # 47 **Sentiment Analysis of Custom Speech Corpus: A proof of concept for NLP**
  Suja Panickar, Rimjhim Sinha, <u>Omkar Londhe</u>, Vidhi Chawla and Omkar Singh **(Remote)**
- #16: **Disease Discourse through Sentiment and Network Analysis**
  <u>Said Salloum</u>, Khadija Alhumaid, Ayham Salloum and Khaled Shaalan **(Remote)**
- #17: **K-means Clustering of Tweet Emotions: A 2D PCA Visualization Approach**
  <u>Said Salloum</u>, Khadija Alhumaid, Ayham Salloum and Khaled Shaalan   **(Remote)**

Awards and closing ceremony 5:20 – 5:30 PM