

TABLE OF CONTENT

Track I: Sentiment Analysis and Arabic Text Analysis

PID	Paper Title	PP
1003	Sentiments and Cognition Interdependence: An Exploratory Study of Sentiment Analysis and Image Schema <i>Mai Magdy M. Sleim</i> mai.sleim@guc.edu.eg	1-5
1017	Sentiment Analysis: Amazon Electronics Reviews Using BERT and Textblob <i>Abdulrahman Emad Mahgoub, Abdulrahman Nasser, Mohamed Yasser Anwar, Hesham Atef, Walaa M. Medhat, M. Saeed Darweesh, and Passent M. El-Kafrawy</i> ab.nasser@nu.edu.eg	6-10
1019	A new framework for an eKYC system <i>Abdallah Gomaa, Omar Rashed, Abdelkarim Refaey, Abdelrahman Mohamed, Marwan Sayed, and Mohsen Rashwan</i> abdallah.mohamed98@eng-st.cu.edu.eg	11-18
1020	Sentiment Analysis from Subjectivity to (Im)politeness Detection: Hate Speech from a Socio-Pragmatic Perspective <i>Samar Assem, and Sameh Alansary</i> samar.assem@alexu.edu.eg	19-26
1027	Sentiment Analysis for Arabic Low Resource Data Using BERT-CNN <i>Mohamed Fawzy, Mohamed W. Fakhr, and Mohamed Abo Rizka</i> mfawzy22@gmail.com	24-26
1043	Smart Customer Care: Scraping Social Media to Predict Customer Satisfaction in Egypt Using Machine Learning Models <i>Mohamed Anwar, Karim Omar, Ahmed Abbas, Fakhreldin Abdelmonim, Mohamed Refaie, Walaa Medhat, Aly Abdelrazek, Yomna Eid, and Eman Gawish</i> M.Hosam@nu.edu.eg	27-34
1030	Arabic Sentences Semantic Similarity Based on Word Embedding <i>Badrya Dahy, Mamdouh Farouk, and Khaled Fathy</i> badryadahy@aun.edu.eg	35-40
1021	Gold Price Prediction Using Sentiment Analysis <i>Mariam Abdou, Mena Shaltout, Alaa Godah, Karim Sobh, Yomna Eid, and Walaa Asal</i> m.abdou@nu.edu.eg	41-44
1040	Deep Learning in Arabic Text Summarization: Approaches, Datasets, and Evaluation Metrics <i>Yasmin Einieh, and Amal AlMansour</i> ymohammadeinieh@stu.kau.edu.sa	45-49
1044	Improving the Performance of Semantic Text Similarity Tasks on Short Text Pairs <i>Mohamed Taher Gamal, and Passent El-Kafrawy</i> mo.taher@nu.edu.eg	50-52
1009	Contrastive Analysis of Colour Representations Using Semantic Corpus Annotation “POS Tagging”: The Holy Quran- A Case Study <i>Ahmed Kassem, and Sameh Alansary</i> ahmed.e.m.kassem@gmail.com	53-59

Track II: Document Analysis and Machine Translation

- 1023 **A Novel Dataset for Known and Unknown Ancient Arabic Manuscripts** 60-65
Lutfiah Al-Homed, Kamal Jambi, and Hassanin Al-Barhamtoshy
labdulazizalhomed@stu.kau.edu.sa
- 1038 **Arabic Documents Layout Analysis (ADLA) using Fine-tuned Faster RCNN** 66-71
Latifah AlJefry, Hassanin Al-Barhamtoshy, Felwah Abu- Abukhodair, and Amany Jamal
latifa.aljiffry@gmail.com
- 1052 **Automatic POS tagging of Arabic words using the YAMCHA machine learning tool** 72-77
Alaa Elnily, Ahmed Abdelghany (Egypt)
alaa.s.elnily@gmail.com
- 1033 **Arabic Machine Translation (ArMT) Based on LSTM with Attention Mechanism Architecture** 87-83
Dalal Al-Juhani, Hassanin Al-Barhamtoshy, and Felwa Abdulkarim Abukhodair
daljohany0001@stu.kau.edu.sa
- 1036 **Neural Networks for Bilingual Machine Translation Model** 84-91
Hassanin Al-Barhamtoshy, and Ashraf Sayed
hassanin@kau.edu.sa

Track III: Computational Linguistics and Arabic Dialects

- 1029 **Learner Corpus in Teaching Greek to Arabic Natives a Computational Linguistic Study of the Play Oedipus the King of Sophocles** 92-96
Fatma Gaber
fgal1@fayoum.edu.eg
- 1026 **The Guidelines of Building a Treebank for Modern Standard Arabic** 97-102
Amena Dheif, Ahmed Abd ElGhany, and Sameh Al Ansary
amena.helmy@alexu.edu.eg
- 1032 **Towards a Psycholinguistic Database of Arabic** 103-108
Noha Fathy, and Sameh Alansary
n.hassan@alexu.edu.eg
- 1050 **A Revised Survey of Paraphrasing Generation Approaches and Tools for Arabic** 109-117
Mahinaz Hegazy, Sameh El-Ansary
mahinaz.hegazy@alexu.edu.eg
- 1000 **Recommender Diagnosis System with Fuzzy Logic in Cloud Environment** 118-123
Maie Aboghazalah, Ayman El-sayed, Nedaa Elsayed, Rasha Elnemr, and Passent Elkafrawy
eng_maie@yahoo.com
- 1008 **Identifying Equivalent Words from Different Arabic Dialects Using Deep Learning Techniques** 124-128
Hamed Ramadan, Mohammad Alqahtani, and Abdullah Algoson
2000629@uj.edu.sa
- 1031 **Using Knowledge Graph Embeddings in Embedding Based Recommender Systems** 129-132
Ahmed Hussein Ragab, Passant El-Kafrawy
ah.hussein@nu.edu.eg
- 1049 **Comparison of Different Deep Learning Approaches to Arabic Sarcasm Detection** 133-140
Mohamed Galal, Ahmed Hassan, Hala H. Zayed, and Walaa Medhat
Mo.Abdelaziz@nu.edu.eg

Track IV: Image Processing and Computational Processing

- 1055** **Automatic Detection of Various Types of Lung Cancer Based on Histopathological Images Using a Lightweight End-to-End CNN Approach** **141-146**
Ahmed Saber Sakr
a.ssakr@yahoo.com
- 1034** **Dynamic Modelling and Identification of the COVID-19 Stochastic Dispersion** **147-151**
M. Taher, Mohammed M. Hedaya, Bahi A. Bakeer, Passant El Kafrawy, and Mahmoud Zakaria
mo.taher@nu.edu.eg
- 1051** **Design and Implementation of a Dockerized, Cross Platform, Multi-Purpose Cryptography as a Service Framework Featuring Scalability, Extendibility and Ease of Integration** **152-157**
Ali Merdan, Heba Aslan, and Nashwa Abdelbaki
a.merdan@nu.edu.eg
- 1014** **A Critical Survey on Arabic Named Entity Recognition and Diacritization Systems** **158-166**
Muhammad Nabil Rateb, Sameh Alansary
mohamed.rateb@alexu.edu.eg
- 1056** **Morphological Analysis of Egyptian Children Corpus by KIDEVAL Program** **166-169**
Heba Salama, Sameh Alansary, Amany Elshazly
Heba.salama.slp@gmail
- 1025** **Fine-tuning Arabic Pre-Trained Transformer Models for Egyptian-Arabic Dialect** **170-174**
Ibrahim Ahmed, Mostafa Abbas, Rany Hatem, Andrew Ihab, and Mohamed Waleed Fahkr
IbrahimAmin532@gmail.com