SAKHAR ALKHEREYF

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Research interests: Document Classification, Social Network Analysis, and Arabic Dialects NLP.

EDUCATION

Columbia University   *Sep 2014 – Nov 2020*
PhD in Computer Science, Natural Language Processing   *New York, NY*
Advisor: Prof. Owen Rambow
Thesis: *Text Classification: Exploiting the Social Network.*

- MPhil conferred in February 2018.

- MS conferred in February 2016.

King Saud University   *Sep 2006 – Jun 2010*
BS in Computer Science (with Honors).   *Riyadh, Saudi Arabia*

WORK EXPERIENCE

KACST   *Jan 2021 - Present*
Assistant Research Professor   *Riyadh, Saudi Arabia*
· The National Center for Data Analytics and Artificial Intelligence (NCDAI).
· Currently working on Arabic NLP and conversational agents for education and healthcare sectors.

Verisk Analytics   *Jun 2017 - Dec 2017*
Machine Learning Engineer   *Jersey City, NJ*
· Joint Development Environment (JDE) team.
· Developed machine learning models for automatic classification of insurance documents.

KACST   *Nov 2010 - Sep 2013*
Research Assistant   *Riyadh, Saudi Arabia*
· Worked on projects in Natural Language Processing and High Performance Computing.
· Project manager of the SAFI project, a commercial real-time automatic text filtration system.
· Project manager of the SANAM supercomputer project (ranked second in the Green500 list, 2012).

Advanced Electronics Company   *Sep 2010 - Nov 2010*
Associate Software Engineer   *Riyadh, Saudi Arabia*
· Hardware Development Team, Research & Development.
· Developed embedded systems for the smart electric meter ADDAD.

TEACHING EXPERIENCE

Prince Sultan University   *Aug 2021 - Dec 2021*
Adjunct Professor   *Riyadh, Saudi Arabia*
· Fall 2021, Data Structures & Algorithms (CS 210).

Columbia University   *Sep 2015 - Jun 2016*
Teaching Assistant   *New York, NY*
· Spring 2016, Natural Language Processing (COMS 4705). Instructor: Prof. Dragomir Radev.
· Fall 2015, Natural Language Processing (COMS 4705). Instructor: Prof. Dragomir Radev.

PUBLICATIONS

- **Sakhar Alkhereyf** and Owen Rambow. Email classification incorporating social networks and thread structure. In *LREC 2020 Proceedings: The International Conference on Language Resources and Evaluation.* European Language Resources Association, 2020

- Faisal Alshargi, Shahd Dibas, **Sakhar Alkhereyf**, Reem Faraj, Basmah Abdulkareem, Sane Yagi, Ouafaa Kacha, Nizar Habash, and Owen Rambow. Morphologically annotated corpora for seven Arabic dialects: Taizi, Sanaani, Najdi, Jordanian, Syrian, Iraqi and Moroccan. In *Proceedings of the Fourth Arabic Natural Language Processing Workshop*, pages 137–147, 2019

- Nizar Habash, Fadhl Eryani, Salam Khalifa, Owen Rambow, Dana Abdulrahim, Alexander Erdmann, Reem Faraj, Wajdi Zaghouani, Houda Bouamor, Nasser Zalmout, Sara Hassan, Faisal Al-Shargi, **Sakhar Alkhereyf**, et al. Unified guidelines and resources for Arabic dialect orthography. In *Proceedings of the Eleventh International Conference on Language Resources and Evaluation (LREC 2018)*, 2018

- **Sakhar Alkhereyf** and Owen Rambow. Work hard, play hard: Email classification on the Avocado and Enron corpora. In *Proceedings of TextGraphs-11: the Workshop on Graph-based Methods for Natural Language Processing*, pages 57–65, 2017

- Abdulqadir A Alaqeeli, Ibrahim Almosallam, **Sakhar Alkhereyf**, and Suliman Alsowelim. Automated text-evaluation of user generated text, August 1 2017. US Patent 9,720,901

- David Rohr, Sebastian Kalcher, Matthias Bach, Abdulqadir A Alaqeeliy, Hani M Alzaid, Dominic Eschweiler, Volker Lindenstruth, **Sakhar Alkhereyf**, Ahmad Alharthiy, Abdulelah Almubarak, et al. An energy-efficient multi-gpu supercomputer. In *2014 IEEE Intl Conf on High Performance Computing and Communications, 2014 IEEE 6th Intl Symp on Cyberspace Safety and Security, 2014 IEEE 11th Intl Conf on Embedded Software and Syst (HPCC, CSS, ICESS)*, pages 42–45. IEEE, 2014

PROFESSIONAL ACTIVITIES

Invited Talks

· Introduction to Arabic Natural Language Processing, PyData - Jeddah, October 31, 2020.

Paper Reviews

· 12th edition of the Language Resources and Evaluation Conference (LREC 2020).

Conference Organizing
Registration Committee

· KACST International Information Technology Conference (KACSTIT 2012).

Research Mentoring

· Mentored interns at KACST

Suliman Alsowelim , and Azzam Alsudais , *Mobile Application for Traffic Modeling* (Summer 2011).

Fai Albadry, *Arabic Sentiment Analysis* (Summer 2021).

TECHNICAL SKILLS

Programming Languages	Python, Java, C/C++
Libraries	PyTorch, Keras, scikit-learn, Stanford CoreNLP, pandas
Software	LaTeX, Matlab, Gephi