

# Ensaf Hussein Mohamed

✉ [EnMohamed@nu.edu.eg](mailto:EnMohamed@nu.edu.eg) , [Ensaf\\_hussein@fci.helwan.edu.eg](mailto:Ensaf_hussein@fci.helwan.edu.eg) ,  [Google Scholar](#)  Cairo, Egypt

## Objective

Seeking a teaching and research position where I can apply my passion for research and expertise to solve real-world technological challenges, particularly in Arabic Natural Language Processing (NLP) and AI. I aim to contribute to Arabic applications benefiting from AI and LLMs and share my knowledge and experience with the next generation.

## Current Position:

- **Associate Professor of Computer Science** Faculty of Computers & Artificial Intelligence, Helwan University, Cairo, Egypt (2020 – Present)
- **Associate Professor of Artificial Intelligence (Secondment)** School of Information Technology and Computer Science (ITCS), Nile University, Giza, Egypt (2024 – Present)

## Previous Posts Held:

**2020 – 2022**

**Associate professor**, Computer Science, Faculty of Computers and Artificial Intelligence, **Helwan Univ.**

**2013 – 2020**

**Assistant professor**, Computer Science, Faculty of Computers and Artificial Intelligence, **Helwan Univ.**

**2006 – 2013**

**Senior Teaching Assistant**, Computer Science, Faculty of Computers and Information, **Helwan Univ.**

**2000 – 2006**

**Teaching Assistant**, Computer Science, Faculty of Computers and Information, **Helwan Univ.**

## Education:

**1997 – 2000**

**Faculty of Computers and Information, Helwan**

B.Sc. of Computers and Information, Computer Science.

**Excellent with honor Degree**

**2000 – 2006**

**Faculty of Computer and Information, Helwan**

Master of Computers and Information, Computer Science

**Thesis:** Streaming Large Scale Images Using Multi-resolution

**2006 – 2013**

**Faculty of Computer and Information, Helwan**

PhD of Computers and Information, Computer Science

**Thesis:** Digital Media Protection and Authenticity Verification

## Teaching Philosophy

---

- If you can't explain your idea to a 6-year-old, then you yourself don't understand it yet. - Albert Einstein.
  - also, I believe with the most effective way to learn it is to teach it.
- 

## Languages

---

- **Arabic** Native Mother Tongue
  - **English** Fluent All lectures, all research work performed in English
  - **French** Fair Simple conversations
- 

## PROFESSIONAL ACTIVITIES:

---

### Current professional responsibilities:

- **Part-time: Researcher** in Natural Language Processing in the Egyptian Courts Digital Transformation Project at the Ministry of Communications and Information Technology **MCIT** - 2022 to date
- **Part Time: Researcher** in Natural Language Processing in the Arab Heritage Project at the Ministry of Communications and Information Technology **MCIT** - 2020 to date
- **Executive Editor** of *FCIH - Informatics Bulletin IB* - 2013-Present
- **Head of Research-Support Center in Computing & Informatics** 2020-2022

## ADMINISTRATIVE ACTIVITIES

---

### Previous administrative responsibilities:

- **Vice-Coordinator**, *Medical Informatics Program, Faculty of Computers and Artificial Intelligence, Helwan University* – 2022- Present
- **Head** of Level IV Control and graduates affairs
- **Member** of the Faculty board – College of Computers and Artificial Intelligence
- **Member** of the Computer Science board- College of Computers and Artificial Intelligence

## STAFF DEVELOPMENT ACTIVITIES

---

### Relevant staff development activities:

- **Member** of the organizing team for the Computing and Artificial Intelligence Olympiad 2022
- **Quality Unit:** responsible for the scientific research standard at the Faculty of Computers & AI

## TEACHING ACTIVITIES

---

### Current Teaching Responsibilities:

#### PostGraduate:

- **Deep Learning** for Diploma of Big Data, ITCS, **Nile University**.
- **Formal Methods and Algorithms Design** for Master of Informatics, **Nile University**.
- **Algorithms** for Data Science Master of Computer Science, Faculty of Computers & AI, **Helwan Univ.**
- **Linguistics Programming** for Diploma of Computational Linguistics, Faculty of Computers & AI, **Helwan Univ.**
- **Algorithms** for Master of Computer Science, Faculty of Computers & AI, **Helwan Univ.**
- **Theory of Computation** for Master of Computer Science, Faculty of Computers & AI, **Helwan Univ.**
- **Introduction to Syntax for Computational Linguistics** for Master of Computational Linguistics, Faculty of Computers & AI, **Helwan Univ.**
- **Introduction to Computational Linguistics** for Diploma of Computational Linguistics, Faculty of Computers & AI, **Helwan Univ.**
- **Semantic Representation** for Master of Computational Linguistics, Faculty of Computers & AI, **Helwan Univ.**
- **Computational Semantic** for Diploma of Computational Linguistics, Faculty of Computers & AI, **Helwan Univ.**
- **Information Extraction** for Master of Computational Linguistics, Faculty of Computers & AI, **Helwan Univ.**

#### UnderGraduate:

- **Machine Intelligence** for 3rd grade students at School of Information Technology and Computer Science, **Nile University**.
- **Ontology and the Semantic Web** for 4<sup>th</sup>-grade students at faculty of Engineering, **Ain Shams University**.
- **Natural Language Processing** for 4<sup>th</sup>-grade students, Computer Science, Faculty of Computers & AI, **Helwan University**.
- **Machine Learning** for 3<sup>rd</sup>-grade students, Medical Informatics, Faculty of Computers & AI, **Helwan University**.
- **Algorithms** for 2<sup>nd</sup>-grade students at faculty of Computers & AI, **Helwan Univ.**
- **Data Structure** for 2<sup>nd</sup>-grade students, Medical Informatics at faculty of Computers & AI, **Helwan University**.

### Previous Teaching Responsibilities:

- Concepts of Programming Languages at faculty of Computers & AI, **Helwan Univ.**
- Functional Programming at faculty of Computers & AI, **Helwan Univ.**
- Compiler and Translators at faculty of Computers & AI, **Helwan Univ.**
- Theory of Computation at faculty of Computers & AI, **Helwan Univ.**
- Artificial Intelligence & Logic Programming at faculty of Computers & AI, **Helwan Univ.**
- Digital Image Processing at faculty of Computers & AI, **Helwan Univ.**
- Data Structure at faculty of Computers & AI, **Helwan Univ.**
- Programming Language II - JAVA at faculty of Computers & AI, **Helwan Univ.**
- Digital Design at faculty of Computers & AI, **Helwan Univ.**
- Programming Language I – C/Python at faculty of Computers & AI, **Helwan Univ.**
- Introduction to computers at faculty of Computers & AI, **Helwan Univ.**

## RESEARCH ACTIVITIES

---

- **Reviewer and Jury** at the Undergraduate Research Forum (**UGRF**) Spring 2024.
- **Session Chair** at the Nile University International Conference on Engineering and Sustainable Technologies (**NILES**) 2024.
- **Speaker** at the **First Biomedical Informatics Workshop**, September 2024.
- **Referee:**
  - Taylor & Francis, Journal of Experimental and Theoretical Artificial Intelligence
  - Springer, Arabian Journal for Science and Engineering
  - IAES, Indonesian Journal of Electrical Engineering and Computer Science.
  - Helwan University, FCI-H, Informatics Bulletin.
  - **Conferences:** *NILES-2024, MIUCC-2022, SemEval-2022, OSACT 2022.*
- **Project Reviewer** at the Computing and Artificial Intelligence Olympiad 2022.

## Research Interests

---

- Natural Language Processing, Arabic NLP, Text Mining, Social Media Analysis.
- Semantic Web, Ontology, knowledge Graph.
- Computer Arabization and Islamic Applications.
- Machine Learning, Deep Learning.
- Medical Image Analysis.
- Watermarking, Steganography, Information Hiding.

## Most Recent and Relevant Research Publications:

---

### Journal Publications

- **MiSC:** A hybrid multi-modal deep learning approach for accurate skin cancer detection. EH Mohamed, N Abdu, M Khalil, H Kamal, EA Rashed. *Multimedia Tools and Applications*, 1-25, 2025.
- **Aftina:** enhancing stability and preventing hallucination in AI-based Islamic fatwa generation using LLMs and RAG. MY Mohammed, SA Ali, SK Ali, AA Majeed, EH Mohamed. *Neural Computing and Applications*, 1-26, 2025.
- **Ar-MuSA:** A Multimodal Benchmark Dataset and Evaluation Framework for Arabic Sentiment Analysis. S Khaled, ME Ragab, AK Helmy, W Medhat, EH Mohamed. *International Journal of Intelligent Engineering & Systems* 18 (4), 2025.
- **BeGrading:** large language models for enhanced feedback in programming education. M Yousef, K Mohamed, W Medhat, EH Mohamed, G Khoriba, T Arafa. *Neural Computing and Applications* 37 (2), 1027-1040, 2025.
- **A Novel Artificial Intelligence Approach to Kennedy Classification for Partially Edentulous Patients Using Panoramic Radiographs.** NA Hassan, A Abdelmongi, S Magdi, M Shaltout, Y Aboelhasan, ... *The European journal of prosthodontics and restorative dentistry*, (2025).
- **Hands-on analysis of using large language models for the auto evaluation of programming assignments.** K Mohamed, M Yousef, W Medhat, EH Mohamed, G Khoriba, T Arafa. *Information Systems*, 102473, 2024.

- Arafakedetect: enhancing fake health news detection with ensemble learning on AraCovidVac. S Mahmoud, AE Aboutabl, EH Mohamed. Social Network Analysis and Mining 14 (1), 237, 2024.
- A Survey on Advances in Arabic Long-Text Summarization Strategies. EH Mohamed. 15-1, (2) 6, النشرة المعلوماتية في الحاسبات والمعلومات 2024.
- A hybrid deep learning framework for skin cancer classification using dermoscopy images and metadata. EH Mohamed, AF Abubakr, N Abdu, M Khalil, H Kamal, M Youssef, ... 2023.
- Re-Talk: Automated Speech Assistance for People with Dysarthria. SK Ali, AM Hassan, AM Salah, DW Mohamed, M Mustafa, EH Mohamed. النشرة المعلوماتية في الحاسبات والمعلومات 22-16, (1) 5, 2023.
- An ensemble transformer-based model for Arabic sentiment analysis. O Mohamed, AM Kassem, A Ashraf, S Jamal, EH Mohamed. Social Network Analysis and Mining 13 (1), 11, 2022.
- Opinion mining: a hybrid framework based on lexicon and machine learning approaches. M Elsaied Moussa, E Hussein Mohamed, M Hassan Haggag. International Journal of Computers and Applications 43 (8), 786-794, 2021.
- An Ensemble Multi-label Themes-Based Classification for Holy Qur'an Verses Using Word2Vec Embedding. EH Mohamed, WH El-Behaidy. Arabian Journal for Science and Engineering, 1-11, 2021.
- Polarity detection of dialectal arabic using deep learning models. SM Mohamed, EH Mohamed, MA Belal. International Journal of Advanced Computer Science and Applications 12 (11), 2021.
- Semantic detection of targeted attacks using DOC2VEC embedding. M S El-Rahmany, E Hussein Mohamed, M H Haggag. Journal of Communications Software and Systems 17 (4), 334-341, 2021.
- QSST: A Quranic Semantic Search Tool based on word embedding. EH Mohamed, EM Shokry. Journal of King Saud University-Computer and Information Sciences, 70, 2020.
- Improved white blood cells classification based on pre-trained deep learning models. E H Mohamed, W H El-Behaidy, G Khoriba, J Li. Journal of Communications Software and Systems 16 (1), 37-45, 2020.
- Violence Detection In Surveillance Videos Using Deep Learning. MM Moaaz, EH Mohamed. FCI-H Informatics Bulletin 2 (2), 1-6, 2020.
- An enhanced sentiment analysis framework based on pre-trained word embedding. EH Mohamed, MES Moussa, MH Haggag. International Journal of Computational Intelligence and Applications 19 (04), 2020.
- An Enhanced Sentiment Analysis Framework Based on Pre-Trained Word Embedding [J]. ME Hussein, MM ElSaid, HM Hassan. International Journal of Computational Intelligence and Applications 19 (04), 2020.
- Automating Text Simplification Using Pictographs for People with Language Deficits. EHM Mai Farag Imam, Amal Elsayed Aboutabl. International Journal of Information Technology and Computer Science(IJITCS), 7, 2019.

- Sentiment Analysis for colloquial Arabic Language. E A.Rahim, M., Nagy, M., Sayed, M., El-Bahy, M., Lotfy, M., Salama, H ... FCI-H Informatics Bulletin 1 (3), 7-11, 2019.
- A Semantic Search and Recitation IOS Application for Holy Quran. E Khattab, A., Sayed, A., Mohee El-Deen, E., shokry, eyad, Ali, H., Hanafy ... FCI-H Informatics Bulletin 1 (3), 1-6, 2019.
- A survey on opinion summarization techniques for social media. ME Moussa, EH Mohamed, MH Haggag. Future Computing and Informatics Journal 3 (1), 82-109, 2018.
- Enhancing K-Means Clustering with Bio-Inspired Algorithms. D Abdullah, H Abdel-Galil, EH Mohamed. International Journal of Computer Science and Network 7 (6), 2018.
- Domain-Independent Text Mining Framework based on Open Information Extraction. EHM Mohamed Lotfy , Mohamed H Haggag. International Journal of Innovative Research in Computer and Communication, 2017.
- Social Engineering Attacks Detection Techniques: Survey Study. MSER Ensaf H. Mohammed, Mohamed H. Haggag. International Journal Of Engineering And Computer Science 5 (12), 9, 2016.
- Digital watermarking techniques, applications and attacks applied to digital media: a survey. E Hussein, MA Belal. threshold 5 (6), 2012.
- Digital watermarking techniques, Applications and Attacks Applied to Digital Media. E Hussein, MA Belal. International journal of communication network security 1 (7), 2012.
- A comparative study of digital watermarking techniques in frequency domain. E Hussein, MA Belal. International Journal of Computer Applications 52 (20), 43-50, 2012.

## **Conference Publications**

- Bias Detection in Media: Traditional Models vs. Transformers in Analyzing Social Media Coverage of the Israeli-Gaza Conflict. MY Mohammed, EI Mohamed, MN Esmat, YA Nagib, NA Radwan, ... Proceedings of the first International Workshop on Nakba Narratives as ..., 2025.
- Detecting Bias in Arabic Political News: A Transformer-Based Ensemble Stacking Approach. AM Abdelhameed, EH Mohamed, W Medhat. 2025 15th International Conference on Electrical Engineering (ICEENG), 1-7, 2025.
- Multi-Label Emotion Detection in Dialectal Arabic and English Using DeepSeek and SILMA AI. KK Elsayed, EH Mohamed, W Medhat. 2025 15th International Conference on Electrical Engineering (ICEENG), 1-6, 2025.
- T5-LDSum: Leveraging T5 Transformer in Hybrid Abstractive-Extractive Long Document Summarization. M Magdy, AM Abdelbaky, EH Mohamed. 2024 6th Novel Intelligent and Leading Emerging Sciences Conference (NILES ...), 2024.
- ArFakeDetect: A Deep Learning Approach for Detecting Fabricated Arabic Tweets on COVID-19 Vaccines. SM Abd El-Mageed, AE Aboutabl, EH Mohamed. 2024 Intelligent Methods, Systems, and Applications (IMSA), 103-108, 2024.
- Evaluating Large Language Models for Arabic Sentiment Analysis: A Comparative Study Using Retrieval-Augmented Generation. S Khaled, EH Mohamed, W Medhat. Procedia Computer Science 244, 363-370, 2024.

- A hybrid arabic text summarization approach based on transformers. A Reda, N Salah, J Adel, M Ehab, I Ahmed, M Magdy, G Khoriba, ... 2022 2nd International Mobile, Intelligent, and Ubiquitous Computing ..., 24, 2022.
- CHILLAX - at Arabic Hate Speech 2022: A Hybrid Machine Learning and Transformers based Model to Detect Arabic Offensive and Hate Speech. EH Makram, Kirollos and Nessim, Kirollos George and Abd-Almalak, Malak Emad ... Proceedings of the OSACT 2022 Workshop @LREC2022, 194--199, 7, 2022.
- akaBERT at SemEval-2022 task 6: an ensemble transformer-based model for Arabic sarcasm detection. AM Kamr, E Mohamed. Proceedings of the 16th international workshop on semantic evaluation ..., 5, 2022.
- Enhanced skin lesions classification using deep convolutional networks. EH Mohamed, WH El-Behaidy. 2019 ninth international conference on intelligent computing and information ..., 63, 2019.

## Training and Certificates

---



- **Stanford Online(Coursera)**, Natural Language Processing with Attention Models, June 2023.
- **Stanford Online(Coursera)**, Natural Language Processing with Probabilistic Models, April 2021.
- **Stanford Online(Coursera)**, Natural Language Processing with Sequence Models, January 2021.
- **Stanford Online(Coursera)**, Natural Language Processing with Classification and Vector Spaces, October 2020.
- **IBM IoT Cloud Developer - Mastery Award**, August 2020
- **IBM AI Analyst Mastery Award**, June 2020
- **IBM Build your own Chatbot- Cognitive Class** – June 2020
- **ITI Blockchain** – Certificate of Completion – April 2020
- **Stanford Online(Coursera)**, Deep Learning Specialization; 2019
- **Udemy**, Natural Language Processing in Python, 2017
- **Stanford Online(Coursera)**, Machine Learning", July 2017
- Mobile Application Development with **IBM Worklight Foundation V6.2**, 31-3 August 2016
- Researcher Academy on Campus Certificate of Attendance: Scopus Journals' Indexing Criteria at **AARU** - August 2020.
- Certificate of Participation: Investing in information technology, virtual reality platforms and online learning systems at **AARU** – August 2020
- **EKB Certificate of Attendance: Improving Scholarly Journal Quality & Global Impact** – July 2020
- **Wolfarm Certificate of Attendance: Data Science Is More than Just Statistics-** July 2020



- Researcher Academy On Campus Certificate of Attendance: The publishing landscape in the Arab World at **AArU** - June 2020.

## References

---

### **Mohamed Belal**

Full professor

Department of Computer Science

Helwan University

Egypt

✉ Belal@fci.helwan.edu.eg

### **Waleed Yousef**

Associate Professor

Electrical and Computer Engineering

University of Victoria

Canada

✉ wyousef@uvic.ca

### **Mostafa Sami**

Full Professor

Computer Science

Helwan University

Egypt

✉ mostafa.sami@fci.helwan.edu.eg



	ا.م.د. انصاف حسين مصطفى محمد	الاسم
	Assoc. Prof. Ensaf Hussein Mostafa Mohamed	Name
	Ensaf Hussein Mohamed	الاسم المستخدم فى النشر العلمى
	أستاذ مشارك ذكاء الاصطناعي – كلية تكنولوجيا المعلومات وعلوم الحاسب – جامعة النيل (انتداب كلي) استاذ مشارك علوم الحاسب – كلية الحاسبات والذكاء الاصطناعي – جامعة حلوان	الوظيفة الحالية وجهة العمل
	دكتورة علوم الحاسب – جامعة حلوان – مصر	الدرجة العلمية (اسم الجامعة والدولة)
	علوم الحاسب - Computer Science	التخصص العام
Natural Language Processing – معالجة اللغات الطبيعية		التخصص الدقيق
Ensaf_hussein@fci.helwan.edu.eg enmohamed@nu.edu.eg		البريد الإلكتروني
-B.Sc. (with honors) in Computer Science from Helwan University - M.Sc. in Computer Science from Helwan University - Ph.D. in Computer Science from Helwan University (doctoral research focused on digital media protection and authenticity verification, 2013 Helwan University, Cairo, Egypt)		المؤهلات العلمية
- Associate Professor of Artificial Intelligence at Nile University  - Associate Professor of Artificial Intelligence at Faculty of Computers and Artificial Intelligence, Helwan University  - Active researcher in national AI projects at the Ministry of Communications and Information Technology (MCIT), contributing to Arabic heritage preservation and digital transformation in the legal domain		السيرة الذاتية

<p>- Previous positions include:</p> <p>Deputy Coordinator of Biomedical Informatics Program, Helwan University;</p> <p>CEO of Informatics Bulletin - Helwan University;</p> <p>Head of Research Support Center in Computing and Informatics;</p> <p>NLP Expert in Digital Transformation for Egyptian Courts and Arabic Heritage Projects – MCIT )</p>	
<p>- ""QSST: A Quranic Semantic Search Tool based on word embedding,"" Journal of King Saud University-Computer and Information Sciences, 70, 2020.</p> <p>- ""Improved white blood cells classification based on pre-trained deep learning models,"" Journal of Communications Software and Systems 16 (1), 37-45, 65, 2020.</p> <p>- ""Enhanced skin lesions classification using deep convolutional networks,"" 2019 ninth international conference on intelligent computing and information ..., 63, 2019.</p> <p>- Published in peer-reviewed journals such as Information Systems, Neural Computing and Applications, and Arabian Journal for Science and Engineering. )</p>	<p>الأبحاث المنشورة Top Publications</p>
	<p>الجوائز</p>