

Hassan A. H. Ebrahim

Assistant Professor & AI Researcher

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Specialization: Natural Language Processing NLP | LLMs

University Profile: [Home](#) [Page](#)

Professional Summary

Academic Researcher and Assistant Professor with 13 years of teaching experience at **Software Engineering Department, faculty of Information Technology, University of Tripoli**. Expert in **Arabic Natural Language Processing (NLP)**. Specialized in Data Collection, Arabic Dialect, Statistical Analysis, Building Corpus and Sentiment Analysis using machine learning, deep learning and LLMs like **MARBERT** and **AraBERT**. Recognized **Peer Reviewer** for international journals in Deep Learning and Information Technology.

Before that I worked about 14 years for two of **government Telecommunication Companies**.

Academic & Administrative Experience

Head of software engineering department

2023 – Present

Department of Software Engineering

- Responsible for providing academic leadership, managing departmental operations, and fostering a productive environment for research and teaching. Manage teaching assignments and departmental schedules. Chair departmental board meetings and represent the department in Faculty councils.

Scientific Peer Reviewer

2023 – Present

International Scientific Journals

- Evaluating research related to Arabic NLP.

Coordinator of Graduate Affairs

2020 – 2023

Department of Software Engineering

- Managing graduate admissions, academic records, and project defense coordination.
- Ensuring adherence to high-quality academic standards for graduate research in Software Engineering.

Lecturer

2013 – 2020

Department of Software Engineering

- Teaching a lot of courses as advanced databases, visual programming and software engineering.

HLC company

2009 – 2013

Telecommunication Company

- I worked as Head of Commercial Services and Information Technology department for government telecommunication company named Hatif Libya Company/Libya. [HLC company](#).

LPTIC company

1999 – 2009

Telecommunication Company

- I worked as IT support then I promoted to Head of Development and Training Department for government telecommunication company named General Post & Telecommunication Company/Libya [LPTIC Company](#).

Education

- I got **M.sc** degree in Electrical Engineering and Computer department major in Information Technology at [Libyan academy](#) - Tripoli/ Libya

Scientific Publications and Books

Publications

- [2026]: "**Aspect Term Extraction** for Libyan Dialect in Airline Sector: Fine-tuning of **MARBERT** and **AraBERT** with Data Augmentation." in progress.
- [2026]: "**Aspect Sentiment Classification** for Libyan Dialect Using **AraBERT** and **MARBERT**." in progress.
- [2026]: "**Enhancing Vaccine Adverse Event Detection on Social Media through LLM-Driven Synthetic Data Augmentation**." Published. [Gharyan University Journal of Engineering Science \(GUJES\)](#).
- [2025]: "**Sentiment analysis resource of Libyan dialect for Libyan Airlines**." Published. [Indonesian Journal of Electrical Engineering and Computer Science \(IJEECS\)](#).
- [2025]: "**Dictionary-based data augmentation for Libyan dialect**." Published. [2025 7th International Congress on Human-Computer Interaction, Optimization and Robotic Applications \(ICHORA\)](#).
- [2024]: "**Towards Sentiment Analysis for Libyan Dialect**." Published. [3rd International Conference on Language Processing and Knowledge Management \(LPKM'2024\)](#).
- [2024]: "**Sahara Pioneers at FIGNEWS 2024 Shared Task: Data Annotation Guidelines for Propaganda Detection in News Items**." Published. [In Proceedings of the Second Arabic Natural Language Processing Conference \(ACL Anthology 2024\)](#).
- [2023]: "**UoT at NADI 2023 shared task: Automatic Arabic Dialect Identification is Made Possible**." Published. [In Proceedings of ArabicNLP 2023 \(ACL Anthology 2023\)](#).
- [2021]: "**Applying Multiple Deep Learning Models for Antipersonal Landmines Recognition**." Published. [Libyan Conference on Automation and Robotics \(LCAR 2021\)](#).
- [2019]: "**Semulation of Leishmaniasis Epibemology in Libya Using Agent Based Modelling**." Published. [19th International conference on Sciences and Techniques of Automatic control and computer engineering \(STA2019\)](#).
- [2019]: "**Agent Based Computing Technique for Epidemiological Disease Modelling**." Published. [19th International conference on Sciences and Techniques of Automatic control and computer engineering \(STA2019\)](#).
- [2015]: "**Applying Arabic Stemming Using Query Expansion**." Published. [The 26th International Conference on Database and Expert Systems Applications. DEXA 2015](#).

Books

- [2023]: "**Structured Query Language SQL**." Published. [SQL](#).
- [2022]: "**Introduction to Databases**." Published. [Book](#).

Technical Expertise

- **Software Engineering & Development::** Software Development Life Cycle (SDLC), Software Architecture, Requirement Analysis, and Database Management.
- **AI & NLP:** Data Collection, Statistical Analysis, Building Arabic linguistic Corpus, Sentiment Analysis, Prompt Engineering (LLMs), Transformers, PyTorch.
- **Programming & Tools:** Python (HuggingFace, Scikit-learn), MySQL, $\text{\LaTeX}$, Microsoft Office.

Languages

Arabic: Native | **English:** Good