

WORK EXPERIENCE

(24 Jan 2023 - Present) Machine learning Engineer at Ogoul:

- Create ChatBot that search the web and another ChatBot with RAG using Langchain, langGraph, and Llama3.1.
- Develop real-time transcription and translation for Speech-to-text task using Whisper.
- GenAI project serves 12 API end points for text, image, video, audio, music and a combinations of them.
- Improve Translation (en-ar from 11 to 63 Bleu)
- Improve violence image classification(94 to 98)
- Improve violence video classification(0.48 to 0.94 safe Recall, 0.82 to 0.98 violent Recall)
- Improve inference speed by 4x on CPU and 5x on GPU, Also optimized memory by 8x using CTranslate2.

(Aug – Dec 2023) Microsoft Internship:

- Automating novel terms and usage detection in Egyptian Arabic [\[link\]](#):
Keywords: (Scratch BERT, MARBERT, problem-solving, Autocorrect, Flask, Visualization)

(may 2018 – Jan 2023) Freelancer:

- (Dec – Jan 2022) Online Farming Website [\[link\]](#):
Keywords: (Firebase, ReactJS, WordPress, AWS Amplify hosting)
- (Oct – Dec 2021) Online Farming App [\[link\]](#):
Keywords: (Firebase, Flutter)
- (may 2018 - 2019) Restaurant Cashier [\[link\]](#):
Keywords: (Java, JDBC, Hibernate, SQL, MySQL, JasperReports, Trello)

ACTIVITIES

- (May 2020 – June 2021) Military service
- (Oct – 2019) NASA Space Apps Cairo [\[link\]](#).
Certificate of appreciation.
- (Sep – 2019) IBM Digital - Nation [\[link\]](#).
Acclaimed with 24 badges from IBM [\[link\]](#).
Video for our project Trash-Money [\[link\]](#).
- (Apr – 2017) Techsolve17- SCCI workshop [\[link\]](#):
Keywords: (Arduino, Sensors, Soft Skills)

OTHER COURSES AND CERTIFICATES

- (Nov – 2021) Python Programmer Bootcamp, 365 Data Science [\[link\]](#).
- (Nov – 2021) Introduction to Data and Data Science [\[link\]](#).
- (Nov – 2021) Getting started with Java, Amegocode [\[link\]](#).
- (Nov – 2021) Getting started with Spring Boot, Amegocode [\[link\]](#).
- (Nov – 2021) Java (Basics) assessment, HackerRank [\[link\]](#).
- (Nov – 2021) Git and Github Essentials, Amegocode [\[link\]](#).
- (Oct – 2021) Introduction to Linear Algebra, 365 Data Science [\[link\]](#).
- (Oct – 2021) Statistics, 365 Data Science [\[link\]](#).
- (Oct – 2021) Introduction to Jupyter, 365 Data Science [\[link\]](#).

CONTACTS

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KHALED EL-SAKA

EDUCATION

Master of Electrical and Computer Engineering – Ottawa University:

May 2022 – Jan 2023

Major: AI and Data Science.

Projects:

- **Chinese sign language Image Classification** [\[link\]](#):
Keywords: (Image processing, Feature Engineering, ResNet, Zernike Moments, Data Augmentation)
- **Static Vs Dynamic, Cybersecurity attack detection** [\[link\]](#):
Keywords: (Preprocessing, Analysis, Feature Selection, Modeling, Kafka, Docker, Static Vs Dynamic Model)
- **Healthcare Chat Bot** [\[link\]](#):
Keywords: (Preprocessing, DialogFlow, NLP, Classification, Clustering, Weighted Association Rules, Evaluation, Error analysis)
- **Bitcoin price prediction using Sentiment Analysis** [\[link\]](#):
Keywords: (Data collection and preprocessing, Sentiment Analysis, MI, LSTM, Evaluation, Error analysis)
- **Fake task detection** [\[link\]](#):
Keywords: (CGAN, RF, AdaBoost)
- **Intrusion Detection** [\[link\]](#):
Keywords: (Dimensionality reduction vs Feature selection, Deep Neural Network, HP Tuning, Flow Chart, TSNE Visualization, Tensorflow)
- **Sentiment Analysis for Arabic tweets** [\[link\]](#):
Keywords: (Data preprocessing, BERT, araBERT, Fasttext, araXLENT)

Faculty of Computers and Artificial Intelligence – Cairo University:

2015 – July 2019

GPA: very good with honor.

Major: Computer Science.

Minor: Information System.

Graduation project: School bus-tracking system [\[link\]](#):

Keywords:(Android, ReactJS, Google Maps API, Firebase, NodeJs, Express, Socket I.O., TypeORM, MySQL)

PROFESSIONAL TRAINING

(Feb 2022–Jan 2023) Digital Egypt Builders Initiative (DEBI):

- (Feb – May) 240 hours of Berlitz English conversation course [\[link\]](#).
- (Feb – May) 200 of Dale Carnegie training certificate [\[link\]](#).
- (Apr – May) IBM Big Data [\[link\]](#).
- (Mar – Apr) IBM Predictive Analytics Modeler [\[link\]](#).
- (Feb – Mar) Huawei HCIA-AI v3 [\[link\]](#).

SOFT SKILLS

- (Feb – May 2023) Dale Carnegie

Communication, Leadership, Becoming a trusted advisor, Presentation, Business Acumen, Strategic Planning, Team Building.

[in](#) khaled-el-saka-962700161 [\[link\]](#)

[Sa2a](#) [\[link\]](#)

[kaggle](#) khaledelsaka [\[link\]](#)