

# Mohammed Nasser

"What we consider a fact is just an approximation of the mind to fill gaps" - Michio Kaku

### Personal Information

Birth Date 1/5/1993

Full Name Mohammed Mahmood Abdulwahab Nasser

Address Mevlana Mah. Ikbal Cad. Block No:10/4 ,Kayseri,Turkey

Email momaabna@gmail.com

Nationality Yemeni

### Education

2019 **2022**, *Master in Geomatics Engineering*, Erciyes University, Kayseri, Turkey. Excellent

2012 **2017**, Bachelor(honor) in Surveying Engineering, University Of Khartoum, Khartoum.

Excellent

# Experience

## Professional

Jun 2022 Present , Full-time Backend Developer , Advanced Computer & Telecommunications Services (ACTS) Company, Khartoum, Sudan.
Remote

Jun 2021 May 2022, Part-time Geospatial Data Analyst , Advanced Computer & Telecommunications Services (ACTS) Company, Khartoum, Sudan.
Remote

Dec 2017 **Sep 2019**, Full-time GIS Developer , Advanced Computer & Telecommunications Services (ACTS) Company, Khartoum, Sudan.

On-site

2017 2018, Part-time Teaching Assistant, Surveying Engineering Department, Faculty of Engineering, University Of Khartoum.
On-site

### Volunteering

Kayseri — Talas Mavlana Mah. — Ikbal Cad.

□ 00905526109355 • ☑ momaabna@gmail.com
 ⊕ momaabna.github.io • • ⊕ momaabna

- 2015 2016, Head Of Cultural Department Of the Yemeni Student Union in Sudan, Yemeni Student Union In Sudan, Khartoum.
  (1 Year)
- 02/2017 **05/2017**, Chairman of the Projects Committee, Surveying Engineering Department committee EW 2017, Khartoum.

#### Training and Courses

- 13/12/2014 **24/01/2015**, Professional Training in Automation (Classic Control PLC Basic And Advanced Application Scada), Jelecom, Khartoum.

  Excellent
  - 17/8/2015 **1/9/2015**, Course in MicroControllers Basic Application, Training And Self-Assessment Department-Sudan University of Scince and Technology, Khartoum. Excellent
- 19/02/2019 **28/02/2019**, *Closed Circuit TV (CCTV)*, New Horizon, Khartoum.
- 16/04/2017 **29/04/2017**, *Course In Machine Learning*, IEEE Sudan, Khartoum.
- 19/01/2017 **02/02/2017**, *Hydrological Modelling Using HEC-HMS*, ETCO Training and Human Development Center, Khartoum.

  Good
- 14/04/2020 **05/05/2020**, Satellite Remote Sensing for Agricultural Applications, NASA's Applied Remote Sensing Training Program (ARSET), Online.

#### **Events and Conferences**

- XI.Turkish National Photogrammetry and Remote Sensing Union Technical Symposium (TUFUAB2022), 2022.
- o Workshop in Cloud Computing IEEE Sudan Khartoum, 2015
- 2019 International Conference on Computer, Control, Electrical, and Electronics Engineering (ICCCEEE). IEEE, 2019.
- 2018 International Conference on Computer, Control, Electrical, and Electronics Engineering (ICCCEEE). IEEE, 2018.

#### Published Works

- Al-Shaebi, Zakarya, Fatma Uysal Ciloglu, Mohammed Nasser, and Omer Aydin.
   "Highly Accurate Identification of Bacteria's Antibiotic Resistance Based on Raman Spectroscopy and U-Net Deep Learning Algorithms." ACS omega (2022).
- Nasser, Mohammed, Atasever, Ümit Haluk. "Estimation of Initial Parameters for 3D Similarity Transformation with Evolutionary Search Algorithms" XI. Turkish National Photogrammetry and Remote Sensing Union Technical Symposium (TUFUAB2022), 2022.
- Al-Mujtaba, Mohammed, Nasser, Mohammed, et al. "In Efficiency of New Horizontal Barcoded Staff Coding and Automatic Leveling Measurement." 2019 International Conference on Computer, Control, Electrical, and Electronics Engineering (ICCCEEE). IEEE, 2019.

 Nasser, Mohammed. "Automatic Road Digitizing of Segmented Aerial Images for Urban Areas Based on K-means and Hough Transformation." 2018 International Conference on Computer, Control, Electrical, and Electronics Engineering (ICCCEEE). IEEE, 2018.

# Languages

Arabic Native

English Advanced Level

Turkish C 2

# Computer Skills

Al and data analysis skills

Python Numpy, Pandas, Scipy, Sklearn, Tensorflow, Keras, Pytorch

Image Processing and Computer Vision Programming Skills

Python OpenCV, C++ OpenCV, Matlab

Geo-spatial data analysis and web mapping

Python GEE, Geopandas, Folium, ArcPy, pyQGIS, GDAL, Rasterio

Javascript GEE, OpenLayers, Leaflet

Web Development skills

Front-End HTML, CSS, Bootstrap, Tailwind, Javascript, React.js

Back-End PHP and Laravel, Python Flask

Other Programming Skills

Languages C++, Python

Database SQL, Mongodb, MySQL, PostgreSQL

GUI Python PyQt5, Visual Basic.NET

Embeded Sys. MicroController, Arduino, Rasperry Pi

Math. Env. Matlab, Octave

Other Computer Skills

Windows Batch scripting

Linux Bash Scripting, Server Management

Softwares Autocad 2D and 3D, ArcGIS, QGIS, Surfer, Photoscan, Erdas Imagine, SNAP

#### Interests

Artificial Intelligence and Neural Networks Modeling, Automation, and Optimization

## Thesis and Open Source

#### Thesis

o Road Extraction from Satellite Imagery Using Deep Learning MasterThesis

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o Evaluation Of The Georeferencing Quality Of Landsat 8 Over Khartoum State Bachelor Thesis

## **Open Sources**

- o QGPT Agent: QGIS Plugin utilizes LLM to automate geospatial processes.
- o SISR: Simplifying Satellite image super-resolution project.
- o Deepness SISR: Adding Satellite image super-resolution feature to QGIS Plugin.
- o Segmentor: GUI to simplify using Segment Anything Model by Meta.
- o Average Path Length Similarity (APLS) Plugin for QGIS Software.
- o Vehicl Counter and Classifier GUI.