



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
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 **Jun 2023** , *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

📞 +966 500816862 • ✉ momaabna@gmail.com
🌐 momaabna.github.io • 🌐 momaabna

Volunteering

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)*, Jeilecom, Khartoum.
Excellent

17/8/2015 **1/9/2015**, *Course in MicroControllers Basic Application*, Training And Self-Assessment Department-Sudan University of Science 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.
- 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.

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🌐 momaabna.github.io • 🔄 [momaabna](https://github.com/momaabna)

- o **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

AI 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, Nest.js
Deployment Linux Config, Docker, Nginx, Cloud-flare

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
GIS Development and Analysis
Photogrammetry and Remote Sensing

Thesis and Open Source Contribution

Thesis

- Road Extraction from Satellite Imagery using Convolutional Neural Network and Optimization Techniques. Learning
MasterThesis
- Evaluation Of The Georeferencing Quality Of Landsat 8 Over Khartoum State
BachelorThesis

Open Sources

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