



# 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.

☎ +966 500816862 • ✉ [momaabna@gmail.com](mailto:momaabna@gmail.com)

🌐 [momaabna.github.io](https://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, ASPs.NET Core  
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  
Geospatial 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.