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Current Address

Precision Agriculture Research Chair (PARC), King Saud University, Riyadh, Saudi Arabia

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PERSONAL DETAILS

Gender : Male
Date of birth : 17 November 1977
Place of birth : Nyala – Southern Darfur State, Sudan
Nationality : Sudanese
Marital Status : Married



QUALIFICATIONS

- **Ph.D** in Water Resources Engineering, Civil Eng. Dept. Universiti Teknologi PETRONAS (UTP), Malaysia, March 2014.
- **M.Sc.** Remote Sensing and Geographical Information Systems, Faculty of Graduate Studies, University Putra Malaysia UPM, Malaysia 2013.
- **M.Sc.** Water Resources Engineering, College of Graduate Studies, University of Khartoum, Khartoum, Sudan 2008.
- **B.Sc.** (Honours) in Agricultural Engineering, Second Class (Division I), Faculty of Engineering, University of Khartoum, Khartoum, Sudan, November 2003.

FIELDS OF INTEREST

- Water Resources Managements using Remote Sensing & Geographical Information System techniques.
- Soil & Water conservation applications.
- Hydraulic & Hydrology studies.
- Studies on Nile basin morphology, its impact and seasonal behavior.
- Remote Sensing & GIS applications in hydrology & water Resources.
- Precision Agriculture

LANGUAGE SKILLS

ARABIC : Mother tongue.

ENGLISH : V. Good

GERMAN : Medium (GRUNDSTUFE II - PROGRAMME)

COMPUTER SKILLS

Office Tools : Microsoft Word, Excel, Power Point, SPSS

Computer Programs : Auto CAD, Solid Works, ArcGIS & R.S.

Programming Lang. : Pascal, C++, Python, MathCAD

PROFISSIONAL EXPERIENCE

- **(Feb. 2016 - Current):** **Researcher**, Precision Agriculture Research Chair (PARC), King Saud University, Riyadh, Kingdom of Saudi Arabia.
- **(Nov. 2015 – Feb. 2016):** **Head** of Agricultural & Biological Engineering Department, Faculty of Engineering, University of Khartoum, Sudan.
- **(Mar.2014–Nov.2015):** **Assist. Prof.**, Agricultural & Biological Engineering Department, Faculty of Engineering, University of Khartoum, Sudan.
Director: Examinations unit, Department of Agri. & Bio. Eng.
Secretary: of Department of Agric. & Bio. Eng.'s Council.
- **(2008-2009):** **Lecturer**, conduct lectures in Hydraulics, Hydrology, Irrigation Engineering, Soil & Water Conservation, Fluid Mechanics, Agricultural Machinery, Agricultural Engineering Systems, Farm Power, Computer Applications at department of Agricultural Engineering, Faculty of Engineering and Architecture, University of Khartoum, Khartoum- Sudan.
 - **Visiting Lecturer** Faculty of Engineering, University of Blue Nile, Blue Nile State, Sudan.

- **Visiting Lecturer** Department of Agricultural Engineering,
Faculty of Engineering, University of Juba, Khartoum Sudan.
- **(2004-2008):** **Teaching Assistant**, Agricultural Engineering Department, Faculty
of Engineering, University of Khartoum.

Awards Received

- **GIAD** company prize for the best academic achievement in Farm Power I course,
September 2002, Department of Agricultural Engineering, Faculty of Engineering.
- **GIAD** company prize for the best academic achievement in Farm Power II course,
September 2003, Department of Agricultural Engineering, Faculty of Engineering.

PUBLICATIONS

International Journals

- Khalid A. Al-Gaadi1, Hassaballa A. A., ElKamil Tola, Ahmed G. Kayad, Rangaswamy Madugundu, Bander Alblewi, Fahad Assiri. (2016) Prediction of Potato Crop Yield Using Precision Agriculture Techniques. *PloS one*, DOI: 10.1371/journal.pone.0162219.
- Hassaballa A. A., Matori A. B., Shafri H. Z. M. (2014), Effect of soil depth on the quantification of soil moisture content value estimated from NOAA satellite images. *Applied Mechanics and Materials* Vol. 567, pp 705-710
- Hassaballa A. A., Matori A. B., Shafri H. Z. M. (2014), Generation of Extensive Moisture Content's Map using Weighted Moisture Values over Multi-surface Cover Types. *Research Journal of Applied Sciences, Engineering and Technology*, MAXWELL 7(8):1603-1611 (ISI: Thomson Reuters/Elsevier Scopus).
- Hassaballa, A. A., Althuwaynee, O. F., & Pradhan, B. (2014). Extraction of soil moisture from RADARSAT-1 and its role in the formation of the 6th December 2008 landslide at Bukit Antarabangsa, Kuala Lumpur. *Arabian Journal of Geosciences*, vol. 7, no7, pp. 2831-2840 (ISI: Springer).
- Hassaballa A. A., Matori A. B., Shafri H. Z. M. (2013), Surface Moisture Content Retrieval from Visible/Thermal Infrared Images and Field Measurements. *Caspian Journal of Applied Sciences Research* CJASR (2), pp. 182-189 (ISI: Thomson Reuters).

- Hassaballa A. A. and A. B. Matori (2011), The Use and Evaluation of Split-Window Techniques for NOAA/AVHRR Surface Temperature Extraction over Different Surface Covers: case study (Perak Tengah & Manjung) area, Malaysia. *International Journal of Civil & Environmental Engineering IJCEE-IJENS* Vol: 11 No: 05, P: 23-28.
- Yasir A. Qurashi; E. S. Ganawa; A. F. Kheiralla; A. A. Hassaballa (2016), Application of Satellites Imagery in Detecting and Mapping Striga Hermonthica in a Sugar Cane Field. *ADVANCES IN BIORESEARCH (ABR)*, accepted.

Conferences

- Hassaballa A. A.; M. A. AL-Mesbah; M. S. M. Satti; M. M. ALmutasim and M. M. Mahgoub (2016), Assessment of Crop Water Requirement for sugar cane using GIS and remote sensing. *International Water Conference (IWC)*, Sultan Qaboos University 13 – 16 March 2016, Oman.
- Hassaballa A. A. and Matori A. B. (2013), Surface and Near-surface Moisture Content Assessment using Multi-Temporal Satellite Images over Perak Tengah and Manjung Regions, Malaysia. *International Symposium on Digital Earth-ISDE13* (Scopus/ EI Compendex/ Inspec), 26-29 August, Kuching, Sarawak, Malaysia.
- Hassaballa, A.A.; Matori, A.B. and Shafri, H. Z. M. (2012), Surface/Sub-surface Moisture Content Modeling Using NOAA/AVHRR, LANDSAT/ETM+ Images and In-situ Measurements. *International Conference on Civil, Offshore & Environmental Engineering (ICCOEE)* 12 – 14 June, Kuala Lumpur Convention Center, Malaysia.
- Hassaballa, A.A.; Matori, A.B. and Shafri, H. Z. M. (2012), Surface Moisture Content Retrieval from Visible/Thermal Infrared Images and Field Measurements. *International Conference on Civil Engineering (AICCE' 12)*, 28th – 30th August, Penang, Malaysia.
- Hassaballa, A.A.; Matori A.B. (2011), The Estimation of Air Temperature from NOAA/AVHRR Images and the study of NDVI-Ts impact, Case Study: The Application of Split-Window Algorithms over (Perak Tengah & Manjung) area, Malaysia. *IEEE International Conference on Space Science and Communication (IconSpace)*, 12-13 July, Page(s): 20 – 24.

- Hassaballa, A.A.; Matori, A.B. (2011), Study on Surface Moisture Content, Vegetation Cover and Air Temperature Based on NOAA/AVHRR Surface Temperatures and Field Measurements. *National Postgraduate Conference (NPC)*, 19th – 20th September, Malaysia, Page(s): 1 – 5. Copyrights: 978-1-4577-1884-7/11/\$26.00 ©2011 IEEE.
- Hassaballa, A.H. Rezaur, R.B., Abdalla, S.H., and Adlan, M.N. (2010), Irrigation water management using remotely sensed data. *The 1st International Conference on Sustainable Building and Infrastructure-ICSBI*. Kuala Lumpur, Malaysia, 15-17 June.
- Hassaballa, A.A., Rezaur, R.B., and Matori, A.B. (2010), Extracting land surface temperature and Normalized Difference Vegetation Index from Landsat-7 image for estimating soil moisture in Perak State. *The 1st International Conference on Sustainable Building and Infrastructure-ICSBI*. Kuala Lumpur, Malaysia, 15-17 June.

CONTACTABLE REFEREES

1. Assoc. Prof. Dr. Abdul Nasir B. Matori

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2. Assoc.Prof. Dr. El Kamil H. Tola

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