

Samuel A. Andam-Akorful

CONTACT INFORMATION	Department of Geomatic Engineering Kwame Nkrumah University of Science and Technology Kumasi, Ghana. aakorful@gmail.com saandam-akorful.coe@knust.edu.gh
RESEARCH INTERESTS	Hydrogeodesy, Climate Change, Spatiotemporal Modeling, Spatial Data Analysis, Machine Learning, Multiresolution Analysis
EDUCATION	Hohai University , Nanjing, China Ph.D., Geodesy and Survey Engineering, December 2015 <ul style="list-style-type: none">Thesis Topic: <i>A Multivariate Analysis of Terrestrial Water Storage Variations and Droughts over West Africa Using GRACE Gravity Data</i> University of Nottingham , Nottingham, UK M.Sc., Navigation Technology, December 2007 <ul style="list-style-type: none">Thesis Topic: <i>Wireless Positioning with Ultra wideband Technology</i> Kwame Nkrumah University of Science and Technology , Kumasi, Ghana B.Sc., Geomatic Engineering (Hons.), June 2005
PROFESSIONAL EXPERIENCE	Lecturer June 2008 to present Department of Geomatic Engineering, Kwame Nkrumah University of Science and Technology Teaching Assistant August 2005 to August 2006 Department of Geomatic Engineering, Kwame Nkrumah University of Science and Technology GIS Technician May 2005 to September 2005 Centre for Remote Sensing and Geographic Information Services, University of Ghana, Legon, Accra.
RELATED RESEARCH EXPERIENCE	Lead Member , Precise temporal gravity field variations determining method using Mascons from GRACE, National Nature Science Foundation of China Grant No. 41204016 [2011 – 2015]
SELECTED REFEREED JOURNAL PUBLICATIONS	<ol style="list-style-type: none">Gebdang B. R., Xie Y., Andam-Akorful S. A., 2016. Estimation of ammonia-nitrogen (NH₃) using an artificial neural networks under bacterial technology. <i>Oriental Journal of Chemistry</i>, 32, 37–45.Awange, J.L., Ferreira, V.G., Forootan, E., Khandu, Andam-Akorful, S.A., Agutu, N.O., He, X.F., 2015. Uncertainties in remotely-sensed precipitation data over Africa. <i>International Journal of Climatology</i> 36, 303-323.Baddoo, T., Guan, Y., Zhang, D., Andam-Akorful, S., 2015. Rainfall Variability in the Huangfuchuang Watershed and Its Relationship with ENSO, <i>Water</i>, 7 , 3243-3262.

4. **Andam-Akorful, S.A.**, Ferreira, V.G., Awange, J.L., Forootan, E., He, X.F., 2015. Multi-model and multi-sensor estimations of evapotranspiration over the Volta Basin, West Africa. *International Journal of Climatology* 35, 3132-3145.
5. Ferreira, V.G., **Andam-Akorful, S.A.**, He, X., Xiao, R., 2014. Estimating water storage changes and sink terms in Volta Basin from satellite missions. *Water Sci. Eng.* 7, 5-16.
6. Tang, X., He, X., **Andam-Akorful, S.A.**, 2014. The performance of BDS relative positioning usage with real observation data. *Bol. Cienc. Geod.* 20, 223-236.
7. Ferreira, V., Gong, Z., He, X., Zhang, Y., **Andam Akorful, S. A.**, 2013. Estimating Total Discharge in the Yangtze River Basin Using Satellite-Based Observations. *Remote Sens.* 5, 3415-3430.
8. Quaye-Ballard, J.A., An, R., **Andam-Akorful, S.A.**, Quaye-Ballard, N.L., 2013. Role of Geoinformatics for Ghana oil and gas industry. *Int. J. Recent Innov. Trends Comput. Commun.* 1, 539-546.
9. Quaye-Ballard, J.A., An, R., Ruan, R., Adjei, K.A., **Akorful-Andam, S.A.**, 2013. Validation of Climate Research Unit High Resolution Time-Series Rainfall Data over Three Source Region: Results of 52 Years. *Adv. Mater. Res.* 3542-3546.
10. Quaye-Ballard, J.A., An, R., Ruan, R., **Akorful-Andam, S.A.**, 2013. Exploring Geospatial data through Verbal Protocol Analysis (VPA): A case study at Hohai University, China. *Int. J. Eng. Educ.* 29, 688-697.
11. Ferreira, V., Gong, Z., **Andam-Akorful, S.A.**, 2012. Monitoring mass changes in the Volta River basin using GRACE satellite gravity and TRMM precipitation. *Bol. Cienc. Geod.* 18, 549-563.

PAPERS UNDER
REVIEW AND IN
PREPARATION

1. **Andam-Akorful, S.A.**, He, X. F., Ferreira, V.G., Ndehedehe, C., Quaye-Ballard, J. A. An investigation into the freshwater variability in West Africa from 1979-2010. *Submitted to Water.*
2. **Andam-Akorful, S.A.**, Ferreira, V.G., Quaye-Ballard, J. A. Assessment of machine learning algorithms in the reconstruction of GRACE-derived Terrestrial Water Storage. *In preparation.*

SELECTED
CONFERENCE
PRESENTATIONS

1. **Andam-Akorful S. A.**, Ferreira, V. G., He, X. F., Quaye-Ballard, J. A., 2015. A Multivariate Analysis of Freshwater Variability over West Africa. *AGU Fall Meeting*, San Francisco, USA.
2. **Andam-Akorful S. A.**, He, X. F., Ferreira, V. G., Quaye-Ballard, J. A., 2012. Spatio-temporal Variations of water storage within the Volta River Basin. *International Symposium on Space Geodesy and Earth System (SGES2012)*, Shanghai, China.
3. **Andam-Akorful, S. A.**, Quaye-Ballard, J. A., Agyemang, A. B., Ankrah, F., Amankwah, S., 2011. A geospatial suite for crime analysis for the Ghana Police Service. *8th College of Engineering Research Retreat*, Tamale, Ghana.
4. **Andam-Akorful, S.A.**, Hill, C.J., Atuahene, I., 2011. Evaluation of ultra wideband for indoor navigation. *61st Annual Conference and Expo, Institute of Industrial Engineering*, Reno, Nevada, USA.
5. **Andam-Akorful, S.A.**, Agyemang A. B., 2009. A mobile navigation application for KNUST campus. *7th College of Engineering Research Retreat*, Koforidua, Ghana.
6. **Andam-Akorful, S.A.**, Agyemang A. B., 2008. Mobile positioning for location based services. *2008 Land Surveyors Seminar*, Accra, Ghana.

SKILLS AND
EXPERTISE

Technical:

GIS, Remote Sensing and Land Surveying
Data Science and Predictive Analytics

Software:

MATLAB, ArcGIS, R Statistical Software, Python Programming Language, Microsoft
Azure Machine Learning and LaTeX

PROFESSIONAL
MEMBERSHIPS

Member, American Geophysical Union
Member, Ghana Institution of Engineers
Member, Ghana Institution of Surveyors