



# NEEMA SIMON SUMARI

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## **GEO-INFORMATICS INFORMATION TECHNOLOGY PROFESSIONAL**

Motivated geo-informatics information technology professional with strong leadership ability, effective interpersonal skills, and excellent programming habits and automatic documentation generation, using popular Microsoft tools, software, and hardware development. Sought out by management for ability to determine end-user needs and provide fitting solutions and services. Generate positive referrals and repeat business through superior service and follow-up. **Fluent in English and Swahili native Language.**

### **Core Expertise**

Big Data Analysis  
Project Risk & Scope  
Requirements Definition  
Presentations & Demos

Teaching & Training  
Team & Project Leadership  
Application Architecture Design  
Image Processing

Customer Satisfaction  
Testing & Support  
Data Integrity  
Open Science

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## **MEMBERSHIPS**

International Society for Photogrammetry and Remote Sensing (**ISPRS**)  
Student Consotium  
Member of Committee on Data for Science and Technology (**CODATA**)  
Member of Advancing for Computing Machinery (**ACM**)  
Member of Institute of Electrical and Electronics Engineers (**IEEE**)  
Member of **IEEE** Education Society Membership  
Member of Sokoine University of Agriculture Academic Staff Association  
Member of United Nations Association (**UN**) - USA

## **PROFESSIONAL IT EXPERIENCE**

**Sokoine University of Agriculture - Morogoro, Tanzania**  
LECTURER – DEPARTMENT OF INFORMATICS

**2008- Present**

- Specialized in lecturing Informatics/Computer Science courses. Supervised seminars and conducted practical sessions, workshops.

**Northrop Grumman-Task/ Information Technology Dept - Huntsville, Alabama, USA 2005-2006**  
INTERN

- Performed operations; supported PC setups, upgrades, debugging, networking, and Web page development.

**Alabama A&M University - Normal, Alabama, USA**  
TUTOR & LAB MONITOR

**2004-2007**

- Assisted and tutored students in computer-oriented programs. Maintained lab equipment.

**TRAINING AND ACTIVITIES****1. United Nations World Geospatial Information Congress (UNWGIC) "The Geospatial Way to a Better World"**

The objective of the Congress is to provide a convening, participatory and inclusive environment to enhance the communication, understanding, knowledge and application of geospatial information management to address local, regional and global challenges.

The Congress was a global event which brought together all stakeholders at the highest level to address and ensure that geospatial information has its widest and fullest utility in service of social, economic and environmental development.

**Deqing, Zhejiang Province, China**

**19 - 21 November 2018**

**2. CODATA (Committee on Data of the International Science Council) Workshop on**

Advancing Interdisciplinary Global Challenges Research Through Data Integration

**Beijing, China**

**30 - 31 July 2018**

**3. Second International Workshop on Artificial Intelligence and Big Data Analysis  
AIABDA2018**

**AIABDA2018** aims to provide an inter- and multi-disciplinary forum for all the professionals involved in artificial intelligence and big data analysis services academia and industry to share research ideas, present latest research achievements, foster cooperation, and encourage international collaboration.

**Macao**

**April. 23 – 25, 2018**

**4. First International Workshop on Artificial Intelligence and Big Data Analysis AIABDA2017**

**AIABDA2017** aims to provide an inter- and multi-disciplinary forum for all the professionals involved in artificial intelligence and big data analysis services academia and industry to share research ideas, present latest research achievements, foster cooperation, and encourage international collaboration,

**Zhuhai, Guangdong, China**

**Dec. 19 – 20, 2017**

**5. First LIESMARS International Graduate Workshop on GEOINFORMATICS in Wuhan**

**University, Wuhan, Hubei Province, China**

**25 – 27 Nov 2017**

**6. ISPRS (International Society for Photogrammetry and Remote Sensing) Geospatial Week 2017**

**Conference Wuhan, Hubei Province, China**

**18–22 Sept 2016**

**7. The CODATA-RDA Research Data Science Summer School  
(International Centre for Theoretical Physics)**

The school focused on growing competence in accessing, analyzing, visualizing, and publishing data.

**Grignano, Trieste, Italy**

**10- 21 July 2017**

**8. Hi-Target International Training Workshop  
(International Academy of Geospatial Information Science, Wuhan University)**

Technology Demonstration and Technical Training of 3D Laser Scanner, Hydrographic Surveying System, CORS, GNSS RTK, Handheld GIS and Total Station.

**Guangzhou, China**

**3- 7 July 2017**

**9. Geo-Informatics summer school**

one of the important platforms to promote the sustainable development of the belt and road initiatives (BRI) where students from all over the world are attracted to experience China's science and technology as well as education level. **Wuhan, Hubei Province, China**

**June 2017**

**10. CODATA International Training Workshop in Big Data for Science**, for Researchers from Countries with Developing or Emerging Economies Computer Network Information Center, Chinese Academy of Sciences. **Beijing, China** **4-15 July 2016**

**11. Conference, 6<sup>th</sup> ISDE Digital Earth Summit, with the theme: "Digital Earth in the Era of Big Data"** **Beijing, China** **7-8 July 2016**

**Teamwork:** Syndicate project groups and team-based culture involving planning, organization, coordination, and commitment.

## **EDUCATION**

**Wuhan University – Wuhan, Hubei, CHINA** **2016 - Present**

*Ph.D. Researcher*

Geo-Spatial Information Science, with specialization in Remote Sensing, Cartography and Geographical Information Engineering.

LIESMARS (Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing),

**Alabama A&M University - Normal, Alabama, USA** **2011**

*MASTER OF SCIENCE - COMPUTER SCIENCE*

Emphasis: Computer Engineering

Thesis: "The Design and Development of a Secure Internet-Based Protocol for the Control of a Remote Solar Tracker."

Cum Laude; Dean's List; GPA: 3.45 out of 4.0

**Alabama A&M University - Normal, Alabama, USA** **2006**

*BACHELOR OF SCIENCE - COMPUTER SCIENCE*

Cum Laude; Dean's List; GPA: 3.03

## **HONOURS AND AWARDS**

- **Best paper** award on the Second International Workshop on Artificial intelligence on Big Data Analysis, **2018** in **Macao**

*Title: Evaluation of Effects of Watershed Degradation on Water Yield: A Case of Mount Uluguru Watershed through Mindu Dam and Morogoro River, Morogoro-Tanzania*

- **Best student** and excellent achievements in **2017**, **Liesmars, Wuhan University**
- **Best paper** award on the first International Conference on Artificial Intelligence and Big Data Analysis, **2017** in **Zhuhai, China**

*Title: Comparison study for the hazard assessment of Khuzdar, Chaman and Wallace Creek fault lines by using the Application of Remote Sensing and GIS*

- Geo-Informatics Summer School, outstanding performance **Wuhan, China** (June 2017)
- CODATA presenter for International workshop **(2016), Italy**
- Linux Professional Institute - Tanzania **2016– 2021** (LPIC Level 1 - LINUX CERTIFICATION)
- 3rd Place in Science, Technology, Engineering, and Mathematics **(STEM) competition – 2011 – U.S.A**
- Cum Laude; Dean's List –**BSc (2006) – U.S.A**
- Outstanding Employee of the year **(2005), Magnolia Trace, U.S. A**
- Employee of the month – January **2006, Magnolia Trace – U.S.A.**

## **PUBLICATIONS**

Sumari, N. S., Shao, Z., Kira, E. **(2017)**. Challenges and Opportunities for the Advancement of GIS Education in Tanzania. *Journal of Education and Practice*, Vol 8. No. 28pg 67-75

Sumari, N. S., Shao, Z., Huang, M., Sanga, C. A., and Van Genderen, J. L. **(2017)**. URBAN EXPANSION: A Geo-Spatial Approach for Temporal Monitoring of Loss of Agricultural Land, *Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci.*, XLII-2/W7, 1349-1355, <https://doi.org/10.5194/isprs-archives-XLII-2-W7-1349-2017>.

Zhenfeng S, Deng J, Wang L, Fan Y, Sumari N, Cheng Q. **(2017)**. Fuzzy AutoEncode Based Cloud Detection for Remote Sensing Imagery. *Remote Sensing*, 9(4), 311; doi: [10.3390/rs9040311](https://doi.org/10.3390/rs9040311)

Sanga C, Sumari N, Tumbo C. **(2013)**. On the Development of Climate Data Visualization tool for Interpretation of Empirical Results from Climate Model: Does it add Value to Different Stakeholders? *6<sup>th</sup> UbuntuNet Alliance Annual Conference*, 223-235

Tumbo S, Sanga C, Sumari N, Kahimba. **(2013)**. Assessing the impacts of climate variability and change on agricultural systems in Eastern Africa while enhancing the region's capacity to undertake integrated assessment of vulnerabilities to future changes in climate-Tanzania, Columbia University

Bandyopadhyay A, Sumari N. **(2012)**. The Design and Development of a Secure Internet-based Protocol for the Control of a Remote Solar Tracker. *American Society of Engineering and Education*, 2011-5571.

## **CONFERENCE/WORKSHOPS PRESENTATION**

Lazaro, B. H & Sumari, N. **(2018)**. Evaluation of Effects of Watershed Degradation on Water Yield: A Case of Mount Uluguru Watershed through Mindu Dam and Morogoro River, Morogoro-Tanzania. *The Second International conference on Artificial Intelligence and Bid Data Analysis, Macao*

Uqba, R., Muneeb, A., & Sumari, N. **(2017)**. Comparison study for the hazard assessment of Khuzdar, Chaman and Wallace Creek fault lines by using the Application of Remote Sensing and GIS. *The first International conference on Artificial Intelligence and Bid Data Analysis, Macao*

Sumari, N. S., Shao, Z., Huang, M., Sanga, C. A., and Van Genderen, J. L. **(2017)**. URBAN EXPANSION: A Geo-Spatial Approach for Temporal Monitoring of Loss of Agricultural Land, *Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci.*, XLII-2/W7, 1349-1355, <https://doi.org/10.5194/isprs-archives-XLII-2-W7-1349-2017>.

## **RESEARCH IN PROGRESS**

Sumari, N.S., Shao, Z., van Genderen, J.L., Masakwa, W., Ujoh, F., Washaya, P. & Gumbo, T. Status of Geo-Informatics Education and Training in Sub Sahara Africa: Initiatives Taken and Challenges.

Sumari, N. S., Shao, Z. & Cobbinah, P. B., Chisenga. C. Urban Futures: Spatio-Temporal Analysis of Land Use and Land Cover Change in Shenzhen, China

Sumari, N. S., Shao, Z., Cobbinah, P. B., Ujoh, F. Spatio-Temporal Analysis of Rapidly Expanding Urban Morogoro, Tanzania: Application of Google Earth Engine

Kira, E. S., & Sumari, N. S. Analysis of Geospatial Data of Morogoro Urban: Lesson for Educationists and Researchers

Tanveer, H., Sumari, N. S., Shan, R. U., Haider, H., Ali, H., & Tanweer, H. Pattern Analysis of Substandard and Inadequate Distribution of Educational Resources in Urban Rural Areas of Abbottabad, Pakistan

Sumari, N. S., Tanveer, H., Kira, E., Shan, R. U., & Tanweer, H. Geospatial Distribution and Accessibility of Primary and Secondary Schools: A case of Abbottabad City, Pakistan

Sumari, N. S., Shao, Z., & Musakwa, W. Effectiveness of Information and Communication Technology as a Teaching Medial aid at Secondary School Education, in Tanzania