## THOMAS MUMUNI BILINTOH

Phone: +1 (517) 303 7904 E-Mail: TBilintoh@clarku.edu Graduate

School of Geography, Clark University

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States of America Updated 10 April, 2021

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### **PROFESSIONAL SUMMARY**

Thomas Mumuni Bilintoh is a Ph.D. student at the Geography Department at Clark University. Bilintoh creates quantitative methods that contribute to Geographic Information Science (GIS) and Remote Sensing. He is currently developing methods to quantify the dynamics of land categories.

#### **EDUCATION**

**Doctor of Philosophy** Worcester, Massachusetts, USA August 2019 - Present

Clark University, Graduate School of Geography Concentration: GIS and Remote Sensing

**Master of Science** East Lansing, Michigan, USA August 2017 - May 2019

Michigan State University, College of Social Sciences

Major: Geography GPA: 3.81/4.00

**Bachelor of Science (First Class honors)** Tarkwa, Ghana April 2008 - April 2012

University of Mines & Technology Major: Geomatic Engineering

GPA: 3.99/4.00

## **PROFESSIONAL EXPERIENCE**

**Research Assistant** Clark University, USA Plum Island Ecosystem August 2019 - Present

I create maps and methods to quantify marsh dynamics in three LTER network sites:

- 1. Plum Island Ecosystems
- 2. Georgia Coastal Ecosystems
- 3. Virginia Coast Reserve

**Research Assistant** MSU, USA Java Atlas Project

I created over 300 maps with Adobe Illustrator and ArcGIS data driven pages for:

- 1. Population density
- 2. Slope
- 3. Digital Terrain Models

## **Managing Director**

Geo-Bilt Engineering Consult

- Negotiating for contracts.
- 2. Supervising execution of awarded contracts.
- 3. Carrying out Cadastral Surveys.
- 4. Carrying out Aerial Surveys.
- 5. Carrying out Hydrographical Surveys.
- 6. Carrying out Engineering Surveys.
- 7. Cartography.

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Accra, Ghana 2014 - 2018

2018 - 2019

#### Volunteer Intern

RS &GIS, Michigan State University

My responsibilities were:

- 1. Sorting LiDAR data.
- Developing a model in ArcGIS model builder to create LAS datasets.
- Developing a model in ArcGIS model builder to compute NDVI from LAS datasets.
- Developing a model in ArcGIS model builder to create separate vegetation above 3 m from all other LAS datasets.

Geomatic Engineer

Accra, Ghana

East Lansing, Michigan

December 18th – January 3rd 2018

January 2013 - July 2014

Hive Properties Limited My responsibilities were:

1. Creating planning schemes.

- 2. Carrying out Cadastral Surveys.
- 3. Carrying out Aerial Surveys.
- 4. Carrying out Hydrographical Surveys.
- Carrying out Engineering Surveys.

## **Assistant Surveyor**

Accra, Ghana

October 2012 - November 2013

State Housing Company Limited

My responsibilities were:

- 1. Carrying out Cadastral Surveys.
- 2. Creating cadastral plans.
- 3. Submitting cadastral plans for approval.
- 4. Carrying out Engineering Surveys.

### **Pupil Teacher**

Tamale, Ghana

2006 - 2007

Fachi 'Little Flower' School Complex

My responsibilities were:

- 1. Teaching Mathematics.
- 2. Teaching Information and Communication Technologies.
- 3. Teaching Music & Dance.
- 4. Preparing lesson materials.

# PUBLICATION AS PEER REVIEWED JORNAL ARTICLE

- 1. Schaetzl, Randall J. Baish, Christopher, Patrick M. Colgan, Jarrod Knauff, Thomas Bilintoh, Dan Wanyama, Michelle Church, McKeehan Kevin, Albert Fulton, and Alan Arbogast. "Variations in Till Texture and Clay Mineralogy of the Saginaw Lobe (Michigan, USA): Evidence for a Sediment-Mixing Process-Model of Till Genesis." Quaternary Research,
- 2. Bilintoh, Thomas Mumuni, and Eric Stemn. 2015. "Municipal Solid Waste Landfill Site Selection in the Sekondi-Takoradi Metropolis of Ghana Using Fuzzy Logic in a GIS Environment." Journal of Environment and Waste Management 2:071-078.

#### PRESENTER AT CONFERENCES

- 2021 Light talk presentation (Virtual). Methods to compare cases concerning categorical transitions during various time intervals. Plum Island Ecosystem All-Scientists Meeting, Massachusetts, USA.
- 2020 Poster presentation (Virtual). Methods to compare cases concerning categorical transitions during various time intervals. American Association of Geographers (AAG), Colorado-Denver, USA.
- 3. 2019 Poster presentation. Component intensities to relate difference by category with difference overall. Plum Island Ecological site review, Amesbury-MA, USA.
- 2019 Oral presentation. Assessing Validity of Famers' Response to Armyworm Infestation in Ejura, Ghana: A Statistical and Remote Sensing Approach, Washington DC, USA.
- 2018 Oral presentation. Comparative Analysis of Vegetation Index from Sequoia and RedEdge Multispectral Cameras. American Society for Photogrammetry and Remote Sensing (ASPRS), Ann Arbor, USA.
- 2018 Oral presentation. The Role of Unmanned Aerial Vehicle (UAV-Drone) Technology in Agriculture. Council

- for Scientific & Industrial Research (CSIR), Ejura, Ghana.
- 7. 2018 oral presentation. **Efficient Nonstationary Auto-correlated Field Simulation Using Convolution Filtering**. Spatial Accuracy, Beijing, China.

## REVIEWER FOR PROFESSIONAL SCIENTIFIC JOURNALS

- 1. 2021 Bulletin of Geography. Socio-economic series
- 2. 2021 NS Applied Journal
- 3. 2020 NS Applied Journal
- 4. 2020 Journal of Geographical Information Systems
- 5. 2020 Heliyon
- 6. 2019 Journal of Geography and Regional Planning (twice)
- 7. 2019 Journal of Geography and Regional Planning (twice)

### **TECHNICAL SKILLS & COMPETENCIES**

#### Advanced

- 8. Collecting geospatial data with Unmanned Aerial Vehicle (UVS) or drones
- 9. Collecting geospatial data with Real Time Kinematic (RTK) Global Positioning Systems (GPS)
- 10. Collecting geospatial data with Total Stations
- 11. Pix4D mapper

#### Intermediate

- 1. R Programming Language
- 2. Python Programming Language
- 3. Google Earth Engine
- 4. ArcGIS Desktop Suite
- 5. TerrSet
- 6. ERDAS Imagine
- 7. GNSS Solution
- 8. QGIS
- 9. GRASS GIS
- 10. Autodesk Civil 3D Suite
- 11. Microsoft Office Suite

### **Beginner**

- 1. ENVI
- 2. Geomatica
- 3. Visual Basic Dot Net

## **GRANTS & SCHOLARSHIPS**

- 1. 22020 \$8,350 The Edna Bailey Sussman Fund for summer research
- 2. 2020 \$200 Remote Sensing Specialty Group 2nd place Guided Poster Competition, AAG 2020
- 3. 2018 \$11,450 from the MasterCard Foundation and Michigan State University for my Master's Thesis field work
- 4. 2018 \$300. Travel Award from the Geography Department of Michigan State University, USA.
- 5. 2017-2018 \$150, 000. Full Scholarship from the MasterCard Foundation to pursues a masters degree in Geography at Michigan State University, USA.
- 6. 2020 \$8,730 from the Edna Bailey Sussman Trust Fund for summer research

## PROFESSIONAL ORGANIZATION AFFILIATION

- 7. 2018-present. American Association of Geographers (AAG)
- 2016-presnt. Ghana Institute of Surveyors (GHiS)
- 9. 2012-present. Institution of Black Engineers (IBE)

### **LEADERSHIP**

2013-PRESENT. Vice President of SMART GHANA FOUNDATION: A non -profit organization that seeks to educate people from the northern parts of Ghana, on the opportunities and significance of education.

### REFEREES

Dr. Robert Gilmore Pontius Jr. Professor Graduate School of Geography Clark

University

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Dr. Ashton Shortridge

Professor and Director of the Social Science Data Analytics Initiative at Michigan State University Department of Geography, Environment, and Spatial Sciences

Michigan State University Tel:

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Email: ashton@msu.edu

Dr. Raechel White

Department of Geography, Environment, and Spatial Sciences, Michigan

State University. Tel: +1(517) 353 0308 Email: raechel@msu.edu

Dr. Michael Goodchild (Pioneer of GIScience)

Emeritus Professor of Geography at the University of California, Santa Barbara. Tel:

+1(805) 455 6529

Email: good@geog.ucsb.edu

Robert Goodwin

Senior Geospatial Analyst/Project Manager, RS&GIS, Michigan State University

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