

CURRICULUM VITAE (CV)

1. CONTACT DETAILS

Correspondence Address : Department of Geospatial Sciences
School of Geosciences
University of Energy and Natural Resources (UENR)
P.O. Box 214
Sunyani, Ghana

E-mail : pdafari@gmail.com / peter.damoah-afari@uenr.edu.gh

Mobile : +233 27 189 6498 / +233 24 681 3162

2. PERSONAL DATA

Surname : **DAMOAH-AFARI**

First Name : **Peter**

Profession : Geospatial Scientist

Nationality : Ghanaian

Date and Place of Birth : 24th October 1968, Accra (Ghana)

Sex : Male

Official Language : English (Fluent)

Other Language(s) : Twi (Mother Tongue), German (Basic)

Criminal Offences : None

Health : Excellent

3. AREAS OF EXPERTISE AND RESEAERCH INTERESTS

- SAR Interferometry for Deformation Monitoring and Measurements.
- Integration of GIS and Remote Sensing for Environmental Monitoring.
- Hyperspectral Remote Sensing for Vegetation, Mineral and Pollution Mapping.
- Land Registration and Cadastre for Sustainable Development

4. EDUCATIONAL QUALIFICATIONS

University Attended : **The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong.**

Degree : Ph.D. in Geodesy (Interferometric Synthetic Aperture Radar – InSAR)

Year : 2003 – 2009

Thesis Topic : Detecting Ground Settlement of Megacities Using InSAR Techniques.

University Attended : **University of Applied Sciences, Offenburg, Germany.**

Degree : Completed Coursework for Master of Science in Communication & Media Engineering.

Year : 2001 – 2003

University Attended : **International Institute for Aerospace Survey and Earth Sciences (ITC), Enschede, the Netherlands.**

Degree : M.Sc. in Geo-Information Systems for Cadastral Applications

Year : 1996 – 1998

Thesis Topic : Spatial Decision Support System (SDSS) for Selecting Sites for Tailings Dams in the Mining Industry of Ghana.

University Attended : **University of Science and Technology (UST), Kumasi, Ghana.**
Degree : B.Sc. (Honours) in Geodetic Engineering
Year : 1990 – 1994

School : **Prempeh College, Kumasi, Ghana.**
Year : 1987 – 1989
Certificate : SC / G.C.E. ‘A’ Level
Subjects Passed : Physics, Chemistry, Mathematics and General Paper

School : **Dormaa Secondary School, Dormaa-Ahenkro, Ghana.**
Year : 1982 – 1987
Certificate : SC / G.C.E. ‘O’ Level
Subjects Passed : English, Biology, Chemistry, Physics, Mathematics, Additional Modern Mathematics, Geography and Economics.

5. AWARDS

- PhD Studentship, Hong Kong Polytechnic University (2003-2006)
- Netherlands Fellowship Programme (NFP), ITC, Netherlands (1996 -1998)
- Ghana Government Scholarship, GCE O- and A – Levels (1982 -1989)

6. OTHER CERTIFICATES

- **Earth Observations for Water Resources Assessment and Monitoring**, EO AFRICA R&D Facility (15-19th May 2022)
- **Innovative Teaching & Assessment Practices in Higher Education Training**, CePDeV, UENR (10-12th January 2022)
- **LAND IN FOCUS – Forest Ecosystems**, EO College Course organized by European Space Agency (ESA) (3rd January 2022).
- **Basic Principles of Radar Backscatter**, EO College Course organized by Friedrich-Schiller Universität, Jena (5th December 2021).
- **LAND IN FOCUS - Basics of Remote Sensing**, EO College Course organized by European Space Agency (ESA) (3rd December 2021).
- **BEYOND THE VISIBLE – Introduction to Hyperspectral Remote Sensing**, EO College Course, organized by German Space Agency, DLR, GFZ (27th November 2021).
- **Advanced Certificate (Skilled Worker) in Metal Scaffolding** (January 2018), Construction Industry Council, Hong Kong.
- **Intermediate Certificate in Metal Scaffolding** (October – December, 2017), Construction Industry Council, Hong Kong.

7. MEMBERSHIP OF PROFESSIONAL BODIES

- **Trainee Professional Engineer (TPE)**: Ghana Institution of Engineers (GhIE), TPE No. 12859, March 2022.
- **Member**: Ghana Geospatial Society, March 2022 – Date
- **Member**: IEEE Geoscience and Remote Sensing Society (IEEE-GRSS), Member No.: 98578463, January 2022 – Date.

8. WORK EXPERIENCE

Name/Address of Employer : **University of Energy and Natural Resources (UENR), Sunyani, Ghana**
Date : October 2018 – Date
Post Held : **University Lecturer** (Oct. 2018 – Date)
Head of Dept. of Geographic Science (Aug. 2020 – July 2022)
Fellow, Regional Center for Energy and Environmental Sustainability

(RCEES) (2019 – Date).

Coordinator for Dean of Students (Feb. 2019 – Aug. 2020)

Department : Geographic Science
Main Job Functions : Duties and Responsibilities include:

- Lecturing / assessment of students in Cadastral Surveying & Mapping, Introduction to Geospatial Data, Introduction to Geodatabases, Basic Photogrammetry, Geographic Information Systems, Remote Sensing, Introduction to Surveying and Mapping, Digital Cartography and Visualization, Statistics and Advanced Research Methods, Advanced Applications of GIS and Remote Sensing.
- Research
- Supervising Student Research and Project Work
- Responsibilities of the Head of Department (HoD) as stated in the appointment letter attached / as stipulated in the University Statutes **61(5)**.
- Responsibilities of Coordinator for Dean of Students as stated in the appointment letter attached.
- Responsibilities as a Fellow of the RCEES as stated in the appointment letter attached.

Name/Address of Employer : **Prospect Pioneer Limited, Kwun Tong, Kowloon, Hong Kong**
Date : 2015 – 2018
Post Held : **Self Employed (Managing Director)**
Department : Business
Main Job Functions : Managing the day-to-day activities of the company.

Name/Address of Employer : **Dimap HK Pty Ltd, 32 F Millennium City 1, 388 Kwun Tong Road, Kwun Tong, Kowloon, Hong Kong**
Date : November 2013 – May 2015
Post Held : **Assistant Project Engineer** (Head of Hyperspectral Section)
Department : Hyperspectral Section
Main Job Functions : Duties include:

- Manage all Hyperspectral Projects – Visible-to-Near Infrared (VNIR), Short Wave Infrared (SWIR) and Thermal Infrared (TIR) Mapping.
- Staff training on Hyperspectral Theory & Techniques, Data Processing Techniques and Methodologies for Mass Production, and Software usage.
- Hyperspectral Data Acquisition / Data Processing
- Preparation of Technical Papers, Presentations, and Training Manuals
- Meeting with Clients and Potential Clients
- Research / Development of Methodologies for Problem Solving using Hyperspectral Data

Name/Address of Employer : **Euroasia Enterprises Limited (EA), Unit No. 416, 4/F, Block A, Po Lung Centre, 11 Wang Chiu Road, Kowloon Bay, Kowloon, Hong Kong**
Date : March 2013 – September 2013
Post Held : **Senior Engineer** (March to June)
Director of Geomatics & Photogrammetry (June to September)
Department : Technical
Main Job Functions : Duties include:

- Staff training on Surveying Theory & Techniques, Theory and
- Practical usage of Trimble Equipment and Solutions, and
- Presentation Skills.
- Liaison Officer Between EA and Local Universities/Government

- Departments.
- Preparation of Technical Papers/Materials for Promotional Activities
- Liaison Officer between EA and Trimble Navigation Limited
- Assignment of Tasks to other EA Staff
- Supervising other EA Staff

Name/Address of Employer : **Engineering Surveys Limited (ESL), Room 1603-4, New Victory House, 93-103 Wing Lok Street, Central, Hong Kong**

Date : January 2012 – May 2012

Post Held : **CAD Surveyor**

Department : Survey / Drawing

Main Job Functions : Responsible for Planning, Execution and Monitoring of Engineering Surveys. Duties include:

- Setting out
- As-Built Surveys
- Topographic Surveys
- Provision of Controls – Vertical and Horizontal
- Monitoring of different features using Levelling techniques
- Marking of Reference Levels
- CAD Drawing
- Quality Control

Name/Address of Employer : **Alliance Professional Surveyors Company Limited, Unit 3, 12/F, Harry Industrial Building, 49-51 Au Pui Wan Street, To Tan, N. T., Hong Kong**

Date : November 2010 – December 2011

Post Held : **Senior Surveyor**

Main Job Functions : Duties include:

- Planning and Execution of Engineering and Structural Condition Surveys
- Report Writing
- Supervision of other staff

Name/Address of Employer : **The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong**

Date : 2003 – 2009

Post Held : **Ph.D. Candidate (2003 – 2009)**

Research Assistant (Part-Time) (February 2009 – May 2009)

Department : Land Surveying and Geo-Informatics (LSGI)

Main Job Functions : Duties include:

- Study of Ground Deformation of Shanghai and Xi'an
- Supervising Students in Land Surveying Practical and Survey Camps
- Designing and deployment of Corner Reflectors for Slope and Landslide Monitoring

Name/Address of Employer : **Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana**

Date : 1999 – 2006

Post Held : **University Lecturer**

Department : Dept. of Geodetic Engineering (now Geomatic Engineering)

Main Job Functions : Duties include:

- Lecturing / assessment of students in Geographic Information Systems (GIS), Cartography, Basic Principles of Surveying, Aerial Photo Interpretation, Land Registration, Control Surveys and Cadastral Surveys.
- Conducting/Assessment of Students' Practical in GIS, Cadastral

- Surveying, Global Positioning System (GPS), and Cartography.
- Supervising Final Year Students in their Research or Dissertation
- Academic Tutor of Geodetic Engineering Students
- Seminar Organizer of the Department.
- Undergraduate and Postgraduate Syllabus Development
- Representative of School of Engineering at the Board of the Faculty of Renewable Natural Resources
- Member of Faculty Infrastructure Committee

Name/Address of Employer : **Universal Surveys, Kasoa, Ghana**
Date : April 1999 – August 1999
Post Held : **Land Surveyor**
Main Job Functions : Duties include, the planning and execution of:

- Control Surveys
- Topographic Surveys
- Cadastral Surveys

Name/Address of Employer : **University of Science and Technology, Kumasi, Ghana**
Date : 1994 – 1996
Post Held : **Teaching / Research Assistant**
Department : Geodetic Engineering
Main Job Functions : Duties include:

- Tutoring/conducting practical work in Applied Optics, Land Surveying, Topographic Surveying, Engineering Surveying, Cadastral Surveying, Cartography, and Aerial Photo Interpretation.
- Assisting lecturers with data collection/processing for their research
- Assisting Final Year students in their individual research/dissertations.

Name/Address of Employer : **Local Authority Junior Secondary School, Ampenkro, Ghana.**
Date : 1989 – 1990
Post Held : **National Service Person (Teacher)**
Main Job Functions : Duties include teaching / assessment of pupils in:

- Mathematics
- Science
- Technical Drawing
- Social Studies

9. LEADERSHIP ROLES / MEMBERSHIP OF COMMITTEES

UNIVERSITY OF ENERGY AND NATURAL RESOURCES (UENR), GHANA

- **Departmental Examinations Officer:** Department of Geospatial Sciences (Aug. 2022 – Date).
- **Undergraduate Student Coordinator:** Department of Geospatial Sciences (Aug. 2022 – Date).
- **Seminar and Outreach Coordinator:** Department of Geospatial Sciences (Aug. 2022 – Date).
- **Acting Head:** Department of Geographic Science (Aug. 2021 – July 2022).
- **Member:** Budgetary Sub-Committee of the Academic Board (Nov. 2021 – Date).
- **Member:** Committee to Look at UENR Graduate School IT Challenges (July – Aug. 2021).
- **Head:** Department of Geographic Science (Aug. 2020 – July, 2021).
- **Fellow:** Regional Center for Energy and Environmental Sustainability (RCEES) (2019 – Date).
- **Member:** Committee to Design a Strategic Plan/Implementation Plan for the School of Geosciences, UENR (April 2021 – Date).
- **Member:** Committee for the Development of Short and Certificate Courses for Department of Geographic Science (July 2022 - Date).

- **Member:** Committee for the Development of Diploma/BSc/MSc/MPhil/PhD in Geomatics (April 2021 - Date).
- **Member:** Committee for the Development of Diploma/BSc/MSc/MPhil/PhD in Geography and Sustainable Development (April 2021 – Date).
- **Member:** Committee to Review a Proposal for MSc/MPhil/PhD in Sustainable Mining (March 2021).
- **Chairperson:** Undergraduate and Postgraduate Programmes in Geoinformation Science Development Committee (August 2020 – Date).
- **Member:** School of Geosciences Board (2020 – 2022).
- **Member:** Academic Board (2019 – 2022).
- **Member:** Students’ Hostel and Accommodation Management Committee, Dormaa Campus (2019 – Date).
- **Coordinator for Dean of Students:** UENR, Dormaa Campus (2019 – 2020).
- **Member:** Dean of Students Board (2019 – 2020).
- **Member:** School of Agriculture and Technology Board (2019 – 2020).

DORMAA TRADITIONAL AREA, GHANA

- **Sanaahene (Financial Secretary)** (December 2015 – Date).
- **Member:** Judicial Committee to Settle Chieftaincy Dispute in Kofi Badukrom (March 2021 – Date).
- **Treasurer:** 2019 Kwafie Festival Committee

DORMAA CENTRAL MUNICIPAL ASSEMBLY (DCMA), GHANA

- **Member:** Executive Committee, Dormaa Central Municipal Assembly (2020 – Date).
- **Member:** Public Relations and Complaints Committee, Dormaa Central Municipal Assembly (2020 – Date).
- **Government Appointee from Dormaa Traditional Council:** Dormaa Central Municipal Assembly (2020 – Date).
- **Chairperson:** Development Planning Sub-Committee, Dormaa Central Municipal Assembly (2020 – Date).
- **Member:** Works Sub-Committee, Dormaa Central Municipal Assembly (2020 – Date).
- **Member:** District Census Implementation Committee (DCIC), 2021 Population and Housing Census, Dormaa Central Municipal Assembly (May 2021 - Date).
- **Member:** District Scholarship Review Committee, Dormaa Central Municipality (2019 – Date).
- **Member:** Inter-Party Dialogue Committee. The National Commission for Civic Education (NCCE), Dormaa Central Municipal Assembly (2020 – Date).
- **Member:** New Cemetery Planning Committee, Dormaa Central Municipal Assembly (Dec. 2021 - Date).
- **Chairperson:** Election 2020 Parliamentary Debate in Dormaa Central Constituency (2020).
- **Chairperson:** District Registration Review Committee (DRRC), Dormaa Central Constituency (2020).

GHANAIAN COMMUNITY IN HONG KONG

- **Financial Secretary** (2012 – 2017).

HONG KONG SOCIETY FOR PHOTOGRAMMETRY AND REMOTE SENSING (HKSPRS)

- **Council Member** (2005 – 2006).
- **Member** (2003 – 2012)

UNIVERSITY OF SCIENCE & TECHNOLOGY, KUMASI, GHANA

- **Vice President:** Association of Geodetic Engineering Students (1993 – 1994)

BRONG-AHAFO STUDENTS UNION (BASU) UST-BRANCH, KUMASI, GHANA

- **Organizing Secretary** (1991 – 1993)

DORMAA SECONDARY SCHOOL, DORMAA-AHENKRO, GHANA

- **Dormitory overseer:** Agyemang-Badu House (1986 – 1987)
- **Form Captain:** Forms 3C, 4 Science and 5 Science (1984 – 1987)

ANTI-BUSHFIRE VOLUNTARY SQUAD, WAMANAFI ZONE, GHANA

- **Zonal Secretary** (1989 – 1990)

EXTRAMURAL ACTIVITIES

- **Member:** Voluntary Work Camps Association of Ghana (1990 – 1996)
- **Member:** Unity Hall Cadet, UST, Kumasi, Ghana (1990 – 1994)
- **Member:** Unity Hall Welfare Committee, UST, Kumasi, Ghana (1991 – 1994)

10. PUBLICATIONS

Book Chapter

- **Damoah-Afari, P.**, Ding, X.L., Li, Z.W., Lu, Z. and Omura, M. (2010). Magnitude and Extent of Six Years of Land Subsidence in Shanghai Revealed by JERS-1 SAR Data. In: Imperatore, P. and Riccio, D. eds. Geoscience and Remote Sensing, New Achievements. India: IN-TECH, 2010.

Journals

- Yahaya, M., **Damoah-Afari, P.**, Mensah, C., Addaney, M. and Kumi, N. Climate Change and Adaptation Strategies in Rural Ghana: A Study on Smallholder Farmers in the Mamprugu-Moaduri District (**IJCCSM-08-2022-0110**). *International Journal for Climate Change Strategies and Management (under review)*
- Densu, S. N. and **Damoah-Afari, P.**, Effects of Speed Hump on Vehicle Performance in the Sekondi-Takoradi Metropolis (COGENTENG-2021-0600R1-211063069), *Cogent Engineering (under review)*.
- Adu-Gyamfi, Q., Quaye-Ballard, J. A., Gikunoo, E., **Damoah-Afari, P.**, Arko-Adjei, A., and Obeng, K. Monitoring and Simulation of Land-use Changes in the Bosomtwe District of Ghana Based on CA-Markov Model (HELIYON-D-22-18099). *HELIYON, ELSEVIER (under review)*.
- Obeng, A. S., Quaye-Ballard, J. A., Arko-Adjei, A. A., **Damoah-Afari, P.** and Obeng, K. Analyzing the Spatial Distribution Pattern of the Various Health Facilities in Asante Akim Central Municipal Assembly. *Journal of Health and Place (under review)*.
- Yahaya, M., **Damoah-Afari, P.**, Mensah, C., Naomi, K., Prempeh, N. A. and Anima, P. A. (2022). Climate Change adaptation strategies of smallholder farmers in the Manprugu-moaduri district of Ghana. *Journal of Energy and Natural Resource Management (JENRM)*, 8(1), 86-94.
- Quaye-Ballard, J.A., **P. Damoah-Afari**, A. Arko-Adjei and J. Owusu. (2008). The use of GIS in Archiving and Accessing Hostels Information: A Case of KNUST Campus. *Journal of the Building and Road Research, Ghana, Vol. 11, 2008*.
- **P. Damoah-Afari** and Quaye-Ballard, J.A. (2008). Computer Assisted Land Valuation using Remote Sensing and Geographic Information Systems (GIS): An Overview. *The Ghana Surveyor*, 2008, 1(1), 51-57.
- Quaye-Ballard, J.A., A. Arko-Adjei and **P. Damoah-Afari**. (2006). The Use of GIS in Archiving and Accessing Hostels Information: A Case KNUST Campus. *Proceedings of Map Africa 2006: Technology Trends, GIS Development, The Geospatial Resource Portal*.
- **Damoah-Afari, P.**, Ding, X.L., Lu, Z. (2005). Subsidence Phenomenon in Shanghai Measured with PSInSAR: Some Preliminary Results. *Journal of Geospatial Engineering*, 7(2), 28-38, 2005.

Conference Proceedings

- Osei, J. D, Anyemedu. F. O. K., Olenya, E., **Damoah-Afari, P.** and Yevugah, L. L. (2022). Culvert sizing for channel crossing at the flooded section of the Daboya-Mankarigu Road (IR10) in Ghana using GIS. *Ghana Infrastructure Conference 2022, 25th-28th July 2022, Accra, Ghana (under review)*.
- **Damoah-Afari, P.**, Ding, X.L., Lu, Z. and Li, Z.W. (2008). Detecting ground settlement of Shanghai using interferometric synthetic aperture radar (InSAR) techniques. *Proceedings of Commission VII, International Society for Photogrammetry and Remote Sensing (ISPRS) Congress Beijing*, 2008, XXXVII(B7), 117-124.
- Ding, X.L, Long, J.P., Xiang, R., Li, Z.W., Chen, Q., **Damoah-Afari, P.**, Feng, G. C. and Lu, Z. (2008). Experimental studies on monitoring ground deformations with corner reflector InSAR. *13th International*

Federation of Surveyors (FIG) and 4th International Association of Geodesy (IAG) Symposium on Geodesy for Geotechnical and Structural Engineering, 12-15 May 2008, Lisbon, Portugal.

- Ding, X.L., R. Xiang, J.P. Long, Z.W. Li, Q. Chen, **P. Damoah-Afari**, K.S. Fung, V. Chan and Z. Lu (2007). Experimental Studies on Monitoring Ground Motions with Corner Reflector InSAR. The 23rd Progress in Electromagnetics Research Symposium (PIERS 2008), 24-28 March 2007, Hangzhou, China.
- **Damoah-Afari, P.**, X.L. Ding, Z. Lu, Z. Li and M. Omura. (2007). Six Years of Land Subsidence in Shanghai Revealed By JERS-1 SAR Data. *International Geoscience and Remote Sensing Symposium 2007 (IGARSS07)*, 23-27 July 2007, Barcelona, Spain.
- Ding, X.L., **P. Damoah-Afari**, C. Zhao and Z. Li (2007). Ground Subsidence Monitoring in Shanghai Based on Multi-Source Data. *The Fifth Cross-Straits Geomatics Conference*, 19–20 November 2007, National Chiao Tung University, Hsinchu City, Taiwan.
- **Damoah-Afari, P.** and X.L. Ding. (2005). Measuring Ground Subsidence in Shanghai Using Permanent Scatterer InSAR Technique. *The 26th Asian Conference on Remote Sensing (ACRS2005)*, 7-11 November, 2005, Hanoi, Vietnam.
- Ding, X.L., Z.W. Li, **P. Damoah-Afari**, and C. Huang (2005). Study of Ground Subsidence in Shanghai with Satellite Radar Remote Sensing. *The First International Symposium on Cloud-prone and Rainy Areas Remote Sensing (1st CARRS)*, October 2005, Hong Kong, China.
- Quaye-Ballard, J.A., J.K. Budu-Smith and **P. Damoah-Afari**. (2004). Land Title Routines with GPS Integrated GIS. *Fourth Annual School of Engineering Research Retreat (SERR 4)*, of the Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana, August 2004.

Oral Presentations

- **Damoah-Afari, P.**, Yevugah, L. L. and Osei, J. D. (Presenter). (2021), Detection and Mapping of Illegal Small-Scale Mining (Galamsey) Activities in Dormaa Municipality Using Remote Sensing. One-Day Symposium on the "The Use of Smart Technologies to Control Illegal Mining and Illegal Logging in Ghana", 10th September, 2021, UENR Campus, Sunyani, Ghana.
- Maximilian Brell, Holger Eichstaedt, and **P. Damoah-Afari** (Presenter). Fusion of Full Waveform LiDAR and Hyperspectral Data. *RIEGL LiDAR 2015 International User (RIEGL LIDAR 2015)*, 5-8 May 2015, Hong Kong.
- **Damoah-Afari, P.** (Presenter) and Ding X.L. Consistent land subsidence pattern in Shanghai mapped by differential interferometry using JERS-1 SAR data. *3rd Annual Seminar on Information Science and Technology (ASSIST'07)*, 30-31 August 2007, Hong Kong.
- **Damoah-Afari, P.** (Presenter) and X.L. Ding. Measuring Ground Subsidence in Shanghai Using Permanent Scatterer InSAR Technique. *The 26th Asian Conference on Remote Sensing (ACRS2005)*, 7-11 November, 2005, Hanoi, Vietnam.

11. . CONFERENCES/SEMINARS/TRAINING WORKSHOPS ATTENDED

- Humanitarian Applications Using NASA Earth Observations (Section B_Part4), “**Assessing Climate Hazards at Refugee Camps**”, Applied Remote Sensing Training (ARSET) Program, NASA, Introductory Webinar, 23rd June, 2022.
- Humanitarian Applications Using NASA Earth Observations (Section B_Part3), “**Detecting Agricultural and Vegetation Changes In and Surrounding Refugee Settlements**”, Applied Remote Sensing Training (ARSET) Program, NASA, Introductory Webinar, 21st June, 2022.
- Humanitarian Applications Using NASA Earth Observations (Section B_Part2), “**Mapping Refugee Settlement Growth and Population Change**”, Applied Remote Sensing Training (ARSET) Program, NASA, Introductory Webinar, 16th June, 2022.
- Humanitarian Applications Using NASA Earth Observations (Section B_Part1), “**Monitoring Urban Damage with Multi-Sensor Satellite Imagery**”, Applied Remote Sensing Training (ARSET) Program, NASA, Introductory Webinar, 14th June, 2022.
- Face to Face course on **Earth Observations for Water Resources Assessment and Monitoring**, EOAFRICA R&D Facility, 15-19th May, 2022, ERATA Hotel, Accra, Ghana.

- **School of Geosciences Seminar on “Understanding the Promotion Criteria of the University of Energy and Natural Resources”**. By Pro-Vice Chancellor of UNER (Prof. Adekoya Adebayo), Dormaa Campus, 11 April, 2022.
- **Public Lecturer on “Prescription for Better Environment and Prevention of Spread of Non-Communicable Diseases: The Perspective of the Geoscientist”**. 10th Matriculation Lecture by Prof. Emmanuel Arhin, University of Energy and Natural Resources (UENR), Sunyani, 29th March, 2022.
- **Training Workshop on Innovative Teaching and Assessment Practices for Higher Education**. Centre for Professional Development (CePDev), University of Energy and Natural Resources (UENR), Sunyani, 10-12th January, 2022.
- **Research and User Support for Sentinel Core Products (RUS) Remote Training on Disasters Management: Assessment of Floods and Burned Areas**. United Nations Office for Outer Space Affairs in Collaboration with RUS Copernicus, Remote Sensing Workshop (Online), 18th & 19th November, 2021.
- **Training Workshop for Stakeholders on Climate Change and Disaster Risk Reduction and Mitigation Strategies**. Dormaa Central Municipal Assembly (DCMA). 17th November, 2021.
- **Inter-Party Dialogue Committee Meeting on Violent Extremism**. The National Commission for Civic Education (NCCE), Dormaa Central Municipal Assembly (DCMA). 10th November, 2021.
- **Google Earth Engine for Machine Learning & Change Detection**. Udemy, Paid Online Course, 18-30th October, 2021. <https://www.udemy.com/>
- **Training on Vegetation Mapping Using Google Earth Engine**, German Aerospace Center (DLR) in Collaboration with West African Science Service Center for Climate Change and Adapted Land Use (WASCAL), AgRAIN Remote Sensing Workshop (Online), 19th & 20th October, 2021.
- **Introduction to NASA Resources for Climate Change Applications (Session A)**, Applied Remote Sensing Training (ARSET) Program, NASA, Introductory Webinar, 29th & 30th September, 2021.
- **Training Workshop on Risk Control, Risk Management and Social Accountability**. The Institute of Local Government (ILGS), Dormaa Central Municipal Assembly (DCMA), Dormaa-Ahenkro, Ghana, 26th May, 2021.
- **Remote Sensing: A Replacement for Ground-Based Monitoring of Critical Infrastructure?** UP42 GmbH Webinar, 12th May, 2021.
- **Training on Climate-related cloud-based data collection, processing, and management**, West African Science Service Center for Climate Change and Adapted Land Use (WASCAL), 3rd - 5th May, 2021.
- **ESRI Imagery and Remote Sensing Educators Summit (Online)**, Environmental Systems Research Institute (ESRI), 28-29th April, 2021.
- **Detecting Disinformation and Hostile Information Activities in Aerial Imagery and Geospatial Data**. Open Aerial Imagery Association Webinar, 16th December, 2020.
- **Open Sources of Aerial Imagery and Geospatial Data**. Open Aerial Imagery Association Webinar, 9th December, 2020.
- **Training Workshop on Environmental and Social Safeguard**. Ghana Secondary Cities Support Programme (GSCSP), Bono Regional Coordinating Council, University of Ghana Learning Centre (Adult Education), Sunyani, Ghana, 26th November, 2020.
- **Capacity Building Training Workshop**. Training on Policy Development; Interpretation Relationship; Time Management; Monitoring and Evaluation; Supervision; and Communication Skills. The Institute of Local Government (ILGS), Dormaa Central Municipal Assembly, Dormaa-Ahenkro, Ghana, 15th September, 2020.
- **2020 Orientation and Training Programme for Members of Metropolitan, Municipal and District Assemblies (MMDAS)**. The Ministry of Local Government and Rural Development (MLGRD) in Collaboration with the Institute of Local Government (ILGS), Dormaa Central Municipal Assembly, Dormaa-Ahenkro, Ghana, 19th – 20th August, 2020.
- **The 3rd Mine Monitoring Workshop**. An Overall Approach to Deformation Monitoring over a Mine and Engineering Sites. Golden Tulip Hotel, Accra, Ghana, 15-16th April, 2019.
- **RIEGL LiDAR 2015 International User (RIEGL LIDAR 2015)**, Hong Kong, 5-8 May 2015.
- **Basic Teaching Techniques for Research Staff and Research Students**, *Educational development Centre, The Hong Kong Polytechnic University, Hong Kong, September 2009.*

- **3rd Annual Seminar on Information Science and Technology (ASSIST'07)**, *The Hong Kong Polytechnic University, Hong Kong*, 30-31 August 2007.
- **Young Scholars Seminar 4**, *Hong Kong Society of Photogrammetry and Remote Sensing (HKSPRS) 29th March 2007, The Hong Kong Polytechnic University.*
- **Workshop on Earth Observation for Urban Planning and Management**, *Department of Land Surveying and Geo -Informatics (LSGI), The Hong Kong Polytechnic University, Harbor Plaza Metropolis, Hung Hom, Hong Kong, 20 - 21 November 2006.*
- **Developing Your Presentation Skills**, *Two-session Certificate Course for Research Students, Educational Development Centre, The Hong Kong Polytechnic University, Hong Kong, 11 and 25 April 2006.*
- **Young Scholars Seminar 3**, *Hong Kong Society of Photogrammetry and Remote Sensing (HKSPRS), The Hong Kong Polytechnic University), 24th November 2005.*
- **The 26th Asian Conference on Remote Sensing (ACRS2005)**, *7-11 November, 2005, Hanoi, Vietnam.*
- **Advanced Training Workshop on Remote Sensing of Land and Ocean Surface in Cloud-prone and Rainy Areas**, *Institute of Space and Earth Information Science, The Chinese University of Hong Kong, Hong Kong, October 10 - 12, 2005.*
- **The First International Symposium on Cloud-prone and Rainy Areas Remote Sensing (1st CARRS)**, *The Chinese University of Hong Kong, Hong Kong, 6-8 October 2005.*
- **5th Workshop of Asia-Pacific Space Geodynamic Program**, *Hong Kong Polytechnic University, Hong Kong, 15-17 June, 2005.*
- **Lasers and Their Applications**, *Complementary Studies Programme, Student Affairs Office, The Hong Kong Polytechnic University, Hong Kong, 4, 11 and 18 November 2003.*

12. STUDENT PROJECTS SUPERVISED

POSTGRADUATE (MPhil)

2021/22 ACADEMIC YEAR

| S/ N o. | Degree/Postgraduate diploma | Name of candidate | Thesis title | Institution | Date of award (month/year) |
|---------------|--|---------------------|---|--|----------------------------|
| 1 | MPhil. in Climate Change (Main Supervisor) | Mumuni Yahaya | Assessing Climate Change Effects and Adaptation Strategies of Smallholder Farmers in the Mamprugu Moaduri District. | University of Energy and Natural Resources | 12/2021 |
| 2 | MPhil. in Climate Change (Co-Supervisor) | Penn Christopher | Indigenous Dry Season Farming Practices as an Adaptation Mechanism to Climate Variability. | University of Energy and Natural Resources | Waiting for the Award |
| 3 | MPhil. in Climate Change (Main Supervisor) | Samuel Osei Brantuo | Investigating the Prospects of Landscape Governance in the Protection of the Subim Forest in Ahafo Region. | University of Energy and Natural Resources | In Progress |

2020/21 ACADEMIC YEAR

| S/ N o. | Degree/Postgraduate diploma | Name of candidate | Thesis title | Institution | Date of award (month/year) |
|---------------|--|----------------------|--|--|----------------------------|
| 4 | MPhil. in Climate Change (Main Supervisor) | Patrick Asare Mensah | A Comparative Analysis of the Impact of Canopy Chlorophyll on Cocoa Health: A Case Study of Bia West District of | University of Energy and Natural Resources | In Progress |

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|---|---|------------------------|--|--|-------------|
| | Supervisor) | | Ghana. | | |
| 5 | MSc in Sustainable Energy Management (Lead Supervisor) | Prince Sule Hamza | Identification of Potential Sites for Installing Solar PV Power Plants in Ghana Using Geospatial Technology. | University of Energy and Natural Resources | In progress |
| 6 | MSc in Environmental Engineering and Management (Lead Supervisor) | Ampah Amprofi Amproche | Combined Effects of Multiple Environmental Factors on Spatio-Temporal Variability of Soil Moisture in the Volta River Basin. | University of Energy and Natural Resources | In progress |

UNDERGRADUATE (DIPLOMA and BSc)

UENR (2018 – DATE)

| Academic session (2018/2019 academic session) / Institution: University of Energy and Natural Resources | | |
|--|------------------------------|--|
| S/No | Student Name | Project Topic |
| 1 | Andrea Kenzie Kandolo (Ms) | Cirime Analysis in Old Tafo Municipality Using GIS |
| 2 | Morrison Abena Kyerewaa (Ms) | Selecting Sites for Waste Dump Using GIS and Remote Sensing: The Case Study of Dormaa Ahenkro. |
| 3 | Bernice Sarfoah Yeboah (Ms) | The Use of GIS in Accessing Automated Teller Machines in Dormaa Ahenkro. |
| 4 | Philip Sackey | Accessing Health Facilities in Dormaa Municipality Using GIS. |
| 5 | Yamoah Manu Franklin | Land Use and Land Cover Mapping Using GIS and Remote Sensing: A Review. |
| 6 | Ebenezer Kwadwo Boahene | Flexibility of GIS in Population and Housing Studies in Dormaa Municipality. |
| 7 | Osei Karikari Desmond | A Malaria Risk Map of Dormaa Ahenkro Using Remote Sensing and GIS. |

| Academic session (2019/2020 academic session) / Institution: University of Energy and Natural Resources | | |
|--|--|---|
| S/No | Student Name | Project Topic |
| 1 | Adjei Korang Rachel (Ms) (BSc Natural Resources). | Detection and Estimation of the Rate of Illegal Logging at Mpameso Forest Reserve Using GIS and Remote Sensing. |

| | | |
|---|---------------------------|--|
| 2 | Victoria Ayeh (Ms) | Land Use / Land Cover Change Mapping in Dormaa Central Municipality Using GIS and Remote Sensing |
| 3 | Gabriel Awuah Addae | Prospects and Challenges of Poultry Farming in the Dormaa Municipality. |
| 4 | Isaac Amoanyi | Effects of Solid Waste Management in Dormaa Central Municipality. |
| 5 | Samuel Adu Karikari | Evolution of Surveying as a Profession in Ghana: Prospects and Challenges. |
| 6 | Evelyn Gyamfi Poluaa (Ms) | A Spatial Assessment of Compliance to Food Vending Safety Standards in Dormaa Ahenkro. |

| Academic session (2020/2021 academic session) / Institution: University of Energy and Natural Resources | | |
|--|---|---|
| S/No | Student Name | Project Topic |
| 1 | Nyame Gloria Amofa (Ms) & Ali Nurudeen Wemetu | A Geodatabase for Managing Poultry Farms in Dormaa Ahenkro. |
| 2 | Pearlina Yeboah (Ms) & Collins Twene | Effect of Waste Disposal on the Quality of Underground and Surficial Water in Dormaa Ahenkro. |

| Academic session (2021/2022 academic session) / Institution: University of Energy and Natural Resources | | |
|--|--|---|
| S/No | Student Name | Project Topic |
| 1 | Gifty Adjulie Akandekum (Ms) & Ruth Amoateng Nyarko (Ms) | Mapping the Extent of Floods in Keta Using Sentinel-1 SAR Data. |

KNUST (1999 – 2001)

| Academic session (1999/2000 academic session) / Institution: Kwame Nkrumah University of Science and Technology (KNUST) | | |
|--|--|--|
| S/No | Student Name | Project Topic |
| 1 | Kwabena Yeboah Acheampong, Nicholas Dzakpasu & Francis K. Ghartey | GPS Planimetric Controls on KNUST Campus. |
| 2 | Quaye-Ballard J. | Land Title Routines with GPS Integrated GIS. |

| | | |
|--|---------------------------------|--|
| | Arthur & Budu-Smith J. K. | |
|--|---------------------------------|--|

| Academic session (2000/2001 academic session) / Institution: Kwame Nkrumah University of Science and Technology (KNUST) | | |
|--|--|---|
| S/No | Student Name | Project Topic |
| 1 | Abdul Sallam Wahab | Knowledge-Based System (KBS) for Selecting the Most Suitable Method for Large-Scale Topographic Surveys of Small Areas. |
| 2 | Isaac Nii Noi Tettyfio & Isaac Lawson | Automation of Students' Registration Process: A Case Study of School of Engineering. |
| 3 | | GIS as a Tool for Revenue Mobilization: Case Study of Kumasi Metropolitan Assembly. |
| 4 | Samuel Gyamfi | GIS as a Tool for Selecting Optimal Site for Parking: Case Study of Adum, Kumasi. |

13. COURSES TAUGHT

POSTGRADUATE

UENR (2018 – DATE)

2021/22 ACADEMIC YEAR

- EEMA 605: Remote Sensing and Geographic Information Systems (PhD – Regular Weekends) (Credits: 3).
- EEMA 513: Remote Sensing and Geographic Information Systems (MSc – Regular Weekends) (Credits: 3).
- EEMA 513: Remote Sensing and Geographic Information Systems (MSc – Regular Weekdays) (Credits: 3).
- SEEM 623: Application of GIS and Remote Sensing in Energy Systems (PhD – Regular Weekends) (Credits 3)

2020/21 ACADEMIC YEAR

- CLIM 703: Statistics and Advanced Research Methods (Credits: 3)
- SEMA 705: Advanced Applications of GIS and Remote Sensing in Energy Systems (Weekend) (Credits: 3).
- SEMA 705: Advanced Applications of GIS and Remote Sensing in Energy Systems (Weekdays) (Credits: 3).

2019/20 ACADEMIC YEAR

- CLIM 703: Statistics and Advanced Research Methods (Credits: 3)
- CLIM 714: Advanced Applications of GIS and Remote Sensing (Credits: 3)

2018/19 ACADEMIC YEAR

- CLIM 703: Statistics and Advanced Research Methods (Credits: 3)
- CLIM 714: Advanced Applications of GIS and Remote Sensing (Credits: 3)

UNDERGRADUATE

UENR (2018 – DATE)

2021/22 ACADEMIC YEAR

- DGIS 207: Cadastral Surveying/Mapping (Credits: 3)
- DGIS 211: Basic Photogrammetry (Credits: 2)
- CCSD 303: Applied Geographical Information Systems (Credits: 3)
- DGIS 102: Introduction to Surveying & Mapping (Credits: 3)
- DGIS 204: Digital Cartography & Visualization (Credits: 3)
- CCSD 302: Applied Remote Sensing (Credits: 3)
- DGIS 212: Diploma Project (Credits: 3)

2020/21 ACADEMIC YEAR

- PLSS 109: Geographic Information Systems and Remote Sensing I (Credits: 2)
- DGIS 103: Introduction to Geospatial Data (Credits: 2)
- DGIS 201: Geographic Information Systems II (Credits: 3)
- DGIS 205: Introduction to Geodatabases (Credits: 2)
- DGIS 207: Cadastral Surveying/Mapping (Credits: 3)
- DGIS 211: Basic Photogrammetry (Credits: 2)
- CCSD 303: Applied Geographical Information Systems (Credits: 3)
- PLSS 106: Geographic Information Systems and Remote Sensing II (Credits: 3)
- DGIS 102: Introduction to Surveying & Mapping (Credits: 3)
- DGIS 108: Statistics for Geoscientists (Credits: 2)
- CCSD 204: Principles of GIS and Remote Sensing (Credits: 3)
- DGIS 212: Diploma Project (Credits: 3)

2019/20 ACADEMIC YEAR

- PLSS 109: Geographic Information Systems and Remote Sensing I (Credits: 2)
- DGIS 103: Introduction to Geospatial Data (Credits: 2)
- DGIS 201: Geographic Information Systems II (Credits: 3)
- DGIS 205: Introduction to Geodatabases (Credits: 2)
- DGIS 207: Cadastral Surveying/Mapping (Credits: 3)
- DGIS 211: Basic Photogrammetry (Credits: 2)
- PLSS 106: Geographic Information Systems and Remote Sensing II (Credits: 3)
- DGIS 104: Geographic Information Systems I (Credits: 2)
- DGIS 102: Introduction to Surveying & Mapping (Credits: 3)
- DGIS 204: Digital Cartography & Visualization (Credits: 3)
- DGIS 212: Diploma Project (Credits: 3)

2018/19 ACADEMIC YEAR

- DGIS 103: Introduction to Geospatial Data (Credits: 2)
- DGIS 205: Introduction to Geodatabases (Credits: 2)
- DGIS 207: Cadastral Surveying/Mapping (Credits: 3)
- DGIS 211: Basic Photogrammetry (Credits: 2)
- DGIS 104: Geographic Information Systems I (Credits: 3)
- DGIS 102: Introduction to Surveying & Mapping (Credits: 3)

- DGIS 204: Digital Cartography & Visualization (Credits: 3)
- DAGR 214: Principles of GIS and Remote Sensing (Credits: 2)
- DGIS 212: Diploma Project (Credits: 3)

KNUST (1999 – 2001)

- GE 124:
- GE 146:
- GE 152:
- GE 174: Aerial Photo Interpretation
- GE 231 Control Surveys 1
- GE 271: Cartography
- GE 271: Cartography
- GE 463: Land and Geographic Information Systems (GIS)
- GE 464: Database Systems
- GE 484: Cadastral Surveying.
- GE 499: Project

14. COMPUTER LITERACY

CAD, GIS AND REMOTE SENSING PACKAGES

- | | |
|------------------|------------------|
| ▪ SNAP | ▪ PARGE |
| ▪ AutoCAD | ▪ ARCOR |
| ▪ MicroStation | ▪ ERDAS IMAGINE |
| ▪ ArcGIS | ▪ DORIS |
| ▪ QGIS | ▪ PCI Geomatics |
| ▪ Global Mapper | ▪ 3DEM |
| ▪ ENVI | ▪ ILWIS |
| ▪ GAMMA Software | ▪ EathView InSAR |

DATEBASE MANAGMENT

- | | |
|-----------------------------------|----------------|
| ▪ Microsoft Access | ▪ Oracle |
| ▪ Structured Query Language (SQL) | ▪ Visual dBase |

PROGRAMMING LANGUAGES

- | | |
|---------|----------|
| ▪ BASIC | ▪ MATLAB |
|---------|----------|

15. REFEREES

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