

EDUCATION

University of Iowa, Iowa City, IA
M.S. Urban and Regional Planning

Anticipated, May 2026

Kwame Nkrumah University of Science & Technology, Kumasi, Ghana

Nov. 2022

B.Sc. Human Settlement Planning; Department of Planning

First-class Honors, top 1% of class

Thesis: "Effects of Urbanization on the Socio-Spatial Structure of Urban Centers; Insights from the Tamale Metropolis"

COURSE HIGHLIGHTS

Transportation Policy and Planning
Land Use Planning; Law and Practice

Geographic Information Systems (GIS)
Project Analysis and Management

Environment and Development
Analytic Methods

PROFESSIONAL SKILLS

Software: ArcGIS Pro, QGIS, ArcGIS, Python, Microsoft Office Suite (Word, Excel, and PowerPoint), AutoCAD, Photoshop, SPSS, BlueSky Statistics, Zoom

WORK EXPERIENCE

Internship

June 2025 – August 2025

Housing Fellowship, Iowa City, IA

- Supported the efficient operations of the organization.
- Utilized ArcGIS Pro, Python, GitHub, and Visual Studio Code to create an efficient transportation routing web app to be used for the organization's home inspections.
- Used ArcGIS Pro to create a spatial component of housing units' data to facilitate presentations and decision making.

Research Assistant

Aug. 2024 – Present

School of Planning and Public Affairs, University of Iowa, Iowa City, IA

- Reviewed over 80 articles on topics such as students' mobility needs, fare-free transit, and modes of transportation in the US.
- Sourced and utilized python to clean data on housing cost and health outcomes for Metro Areas in the U.S.
- Conduct conceptual and theoretical reviews on housing and health outcomes using over 100 articles and books.

Assistant Physical Planner

Nov. 2023 – July 2024

Physical Planning Department, Tamale Metropolitan Assembly, Tamale, Ghana

- Applied AutoCAD to review numerous neighborhood designs.
- Used QGIS to make over 20 infrastructure maps for planning purposes (road network, sanitation, education, health, etc.).
- Advised on sustainable urban management strategies at the local government level.

Land Use and Environmental Planner

Oct. 2023 - July 2024

GeoMass Consult, Tamale, Ghana

- Wrote a \$13,000 contract-winning proposal (awarded by the World Bank/West Gonja Municipal Assembly); for the preparation of a Spatial Development Framework and a Structure Plan.
- Supervised 12 community engagements, communicating the purpose of the project and their role in an understandable way for the layperson.
- Moderated stakeholder engagements, including the mayor of the municipal and heads of institutions such as health, education, police, environmental protection agency, chiefs, 12 council members, etc.
- Utilized concept-framing strategies to minimize conflicts and conflicts of interest, which improved data accuracy.
- Applied QGIS to prepare several maps of road traffic, road networks, population distribution, and spatial growth.

PUBLICATIONS

- **A.R. Adam**, S.A. Takyi, O. Amponsah et al. 2023 "Rethinking sustainable urban management: Effects of urbanization on the socio-spatial structure of the Tamale metropolis." *Urban Governance*, Elsevier 292-303
<https://doi.org/10.1016/j.ugj.2023.06.003>
- Liwur, S. B., **Adam, A. R.**, Tagnan, J. N., Sadique, S., Asibey, M. O., Takyi, S. A., & Amponsah, O. 2025 "For or against sustainable development? A geospatial analysis of the state of green space ecosystems in West Gonja, Ghana." *Land Use Policy*, 151, 107480. <https://doi.org/10.1016/j.landusepol.2025.107480>

PROJECTS

Comprehensive Plan Update, West Branch, Iowa

Fall 2025 – Spring 2026

Graduate Course: Capstone Project (Group)

- Served as co-editor for the comprehensive plan update team, ensuring coherence of various chapters of the report, including the transportation chapter.
- Served as the inter-group liaison to ensure strong collaboration and consistency among the four teams simultaneously working in the city on the comprehensive plan, housing needs assessment, historic preservation, and capital improvement plan.
- Organized and facilitated biweekly team managers' meetings that support effective teamwork among teams.
- Presented project methodological framework to West Branch local government (project partners).
- Utilized ArcGIS Pro to create vacant land map to facilitate optimal land use decision making at the local level.
- Participated in community engagements and led the growth scenarios' activity, explaining scenarios in the simplest way possible to residents.
- Wrote the land use and housing chapters of the data analysis.

The Role of Fare-free Transit in Sustainable Transportation; The Case of Iowa City Fare-free Transit

Fall 2025

Graduate Course: Transportation Policy and Planning

- Reviewed over 30 articles and reports on fare-free transport in the US and across the globe.
- Obtained and analyzed both qualitative and quantitative data.
- Wrote considerably on the role of fare-free transit on the environmental conservation, efficiency, and equity principles of sustainability.
- Utilized ArcGIS Pro to create transit accessibility map to support the analysis.
- Wrote 11-page report

Connecting the Dots: Determinant of the Use of Sustainable Modes of Transportation in Sacramento

Spring 2025

Graduate Course: Applied GIS for Planning and Policy Making

- Reviewed 25 journal articles on determinants of modes of transportation in the US and other countries.
- Formulated hypotheses based on the review
- Sourced data from the Sacramento regional transportation study and utilized Excel to clean it.
- Used ArcGIS Pro to map the variables to visualize correlation
- Wrote a 14-page report

Integrated Planning and Management for Metropolitan Planning

Spring 2022

Undergraduate Course: Metropolitan Planning Lab

- Served as a leader of a group of four classmates.
- Ensured effective and efficient teamwork.
- Assigned tasks to team members based on their skills and compiled the final document.
- Prepared a spatial development framework and a structure plan for a municipality.
- Wrote reports ranging from 20 – 90 pages.

AWARDS AND SCHOLARSHIPS

- **Third Runner Up (Group)-Builders' Idea Challenge**, KNUST, Kumasi
- **Best Graduating General Arts Student**, Fatih College, Tamale
- **Fully-funded Scholarship Award**, Fatih College, Tamale

Aug. 2021
May 2018
2012 – 2018

ACTIVITIES & AFFILIATIONS

American Planning Association, Member

Attended Iowa 2024 APA Planning annual conference, "Creating Tomorrow's Workforce, Housing, and Economy," Iowa Chapter, Sioux City, IA

Senator

Sep. 2024 - Present

Graduate Students Senate, University of Iowa, Iowa City, IA

- Represent the School of Planning and Public Affairs in senate discussions and relay information.
- Serves as a member of the graduate students' travel funds committee, reviewing and scoring all applications, including Masters and PhDs.
- Elected to serve as a member of the Graduate College Council 2025/2026 academic year.
- Attend university graduate council meetings for executive discussions on academic affairs, to advise the Dean.