

LEONARD-ALLEN AMARH QUAYE

320 Hutcheson Hall, Blacksburg, VA. 24061

 [Website](#)  LeoAllen@vt.edu  [LinkedIn](#)  [Github](#)

Education

Virginia Tech

Blacksburg, Virginia

Ph.D. in Economics, Agriculture

Expected: 05/2025

- Dissertation: Modeling Food Commodity Prices and Market Dynamics
- Committee: [Shamar L. Stewart](#) (Chair), [Olga Isengildina Massa](#), [Clint Neill](#), [Chanit'a Holmes](#), [Le Wang](#)

The University of Georgia

Athens, Georgia

M.Sc. in Agricultural & Applied Economics

05/2020

The University of Ghana, Legon

Accra, Ghana

B.Sc. in Agriculture (Agricultural Economics - First Class Honors)

05/2017

Areas of Interest

- Applied Econometrics
- Time Series Analysis
- Development Economics
- Agribusiness

Publications

Under Review

- **Quaye, L-A.**, Stewart S. L., Holt, M. T., Neill C., *Exploring the Dynamics of the El Niño Southern Oscillation and Food Commodity Prices*
- **Quaye, L-A.**, [Kostandini G.](#) *Impact of Formal Household Land Ownership on Farm Productivity & Rural Youth Employment in Agriculture in Ghana.*

Policy Paper

- Gupta, A. and **Quaye, L.**, “Cost-benefit Analysis of World Food Programme’s Food Assistance for Assets Projects: Evidence from Rwanda and Zimbabwe.” UN World Food Programme (WFP), April 5, 2022.

Working Papers

- *Corn Basis and Transportation Disruptions along the Mississippi River*
- [Nuworsu, E. K. M.](#) , **Quaye, L-A.** *Improved Drinking Water Sources and Self-Reported Drinking Water Quality.*
- Asamoah, G., Appiah, E. C., **Quaye, L. A.**, Adams, A. A., Kindo, M. D., Egyir I.S., & Anim-Somuah, H. *Sustainable Agriculture for National Development: The Role of Government Investment in Agricultural Sector Growth.*

Non-Peer Reviewed Online Publications

- Abedin, N., Alwang, J., Chen, S., Fan, F., Liverpool, A., Navarette, J., Posadas, B., **Quaye, L.**, & Tajanpure, P. (2022) Using Remote Sensed Data For Social & Economic Decision Making In Zimbabwe. *University of Virginia Biocomplexity Institute.* <https://aaec-vt.shinyapps.io/dspg22Zimbabwe/>.
- Gupta, A., Kahsai, M., Pierce, T., Prisbe, C., **Quaye, L.**, & Toure M. (2021) Availability of Services: Evolving Demographics, Housing, & Traffic in Rappahannock County, VA. *University of Virginia Biocomplexity Institute.* <https://aaec-vt.shinyapps.io/Rappahannock/>.

Presentations & Conferences

Transportation Disruptions and Corn Basis Volatility along the Mississippi River

Agricultural & Applied Economics Association (AAEA) Meeting, Denver, CO

07/27-29/2025

An Analysis of Corn Basis Volatility Along the Mississippi

Conference on Applied Commodity Price Analysis, Forecasting, and Market Risk Management, Chicago, IL

04/14-15/2025

Exploring the Dynamics of the El Niño Southern Oscillation and Food Commodity Prices

Graduate Student Seminar Series, Dept. of Agricultural and Applied Economics, Virginia Tech

11/20/2024

Exploring the Dynamics of Food Commodity Prices & Weather Anomalies using a STAR model

Agricultural & Applied Economics Association (AAEA) Meeting, New Orleans, LA

07/29/2024

Virginia Association of Economists Annual Meeting, Lexington, VA

04/25-26/2024

Graduate & Professional Student Senate Research Symposium, Virginia Tech

03/27/2024

Southern Agricultural Economics Association (SAEA) Meeting, Atlanta, GA

02/3-6/2024

Using Remote Sensed Data for Social & Economic Decision Making in Zimbabwe

Data Science for the Public Good - Annual Symposium, Virginia Tech

08/04/2022

Availability of Services: Evolving Demographics, Housing, & Traffic in Rappahannock County, VA

Data Science for the Public Good - Annual Symposium, Virginia Tech

08/06/2021

Willingness of Consumers to Accept GM Maize in the Accra Metropolis

Poster Presentation, Department of Ag. Econ. & Agribusiness, The University of Ghana, Accra, Ghana

05/2018

Research Experience

Virginia Polytechnic Institute & State University <i>Graduate Research Assistant</i>	Blacksburg, Virginia <i>08/2020 - Present</i>
Data Science for the Public Good <i>Graduate Research Fellow/Team Leader</i>	Virginia Tech & UVA Biocomplexity Institute <i>06/2022 - 08/2022</i>
United Nations WFP: Food Assistance for Assets Project <i>Research Associate (with Anubhab Gupta)</i>	Virginia Tech <i>08/2021 - 05/2022</i>
Data Science for the Public Good <i>Research Associate/Mentor</i>	Virginia Tech & UVA Biocomplexity Institute <i>06/2021-08/2021</i>
The University of Georgia <i>Graduate Research Assistant</i>	Athens, Georgia <i>08/2018 - 05/2020</i>
The University of Ghana, Legon <i>Research Assistant</i>	Accra, Ghana <i>09/2017 - 09/2018</i>

Teaching Experience

Virginia Polytechnic Institute & State University <i>Instructor of Record</i> <i>AAEC 1006 - Macroeconomic Principles</i>	Blacksburg, Virginia <i>Spring 2025</i>
<i>Co-Instructor</i> <i>AAEC 1006 - Macroeconomic Principles</i>	<i>Spring 2023, Fall 2022</i>
<i>AAEC 3424 - Value-Based Management in Agribusiness (Guest Lecture)</i>	<i>Spring 2023</i>
<i>Graduate Teaching Assistant</i> <i>AAEC 5946: Econometric Theory & Practice</i>	<i>Fall 2024</i>
<i>AAEC 5904: Project and Report - Graduate Capstone</i>	<i>Summer 2024, 2023</i>
<i>AAEC 4484/5484; STAT 5484 - Applied Economic Forecasting (In-person)</i>	<i>Spring 2024</i>
<i>AAEC 5484 - Applied Economic Forecasting (Online)</i>	<i>Spring 2024</i>
<i>AAEC 5014 - Applied Economic Analytics (Online)</i>	<i>Fall 2023</i>
<i>AAEC 5804 - Fundamentals of Econometrics (Online)</i>	<i>Spring 2021</i>
<i>AAEC 5024 - Mathematical Programming for Economists (Online)</i>	<i>Fall 2020</i>
The University of Georgia <i>Graduate Teaching Assistant</i> <i>AAEC 3690 - Agribusiness Finance</i>	Athens, Georgia <i>Fall 2019</i>
The University of Ghana, Legon <i>Teaching Assistant</i> <i>AGEC 212: Macroeconomics: Principles & Application to the Economy of Ghana</i>	Accra, Ghana <i>09/2017 - 09/2018</i> <i>Spring 2018</i>
<i>AGEC 211: Microeconomics: Principles & Application- Households & Firms</i>	<i>Fall 2017</i>
D-Mega College (Remedial School), Madina <i>Academic Tutor (Interim)</i>	Accra, Ghana <i>08/2017 - 09/2017</i>

Professional Experience

COVID-19 Web Analytics App <i>Project Associate (with Ernest K. Nketiah)</i>	Humboldt University of Berlin <i>06/2022</i>
Ghana Revenue Authority, Kaneshie Medium Taxpayer Office <i>Intern</i>	Accra, Ghana <i>06/2016 - 09/2016</i>

Grants

Committee on Opportunities and Status of Black Agricultural Economists (COSBAE) <i>Agricultural and Applied Economics Association (AAEA) Meeting (2024) - New Orleans, LA</i>	<i>Funded</i>
Virginia Tech Graduate & Professional Student Senate Conference Travel Grant <i>Agricultural and Applied Economics Association (AAEA) Meeting (2024) - New Orleans, LA</i>	<i>Awarded: \$300</i>
<i>Virginia Association of Economists Annual Meeting (2024) - Lexington, VA</i>	<i>Awarded: \$300</i>
<i>Southern Agricultural Economics Association (SAEA) Meeting (2023) - Atlanta, GA</i>	<i>Awarded: \$300</i>

Honors & Awards

- [AAEA-COSBAE Mentoring and Outreach Leadership Development \(M.O.L.D.\) Program Fellow](#) **2024-2025**
- Best Paper Award at the Virginia Association of Economists Meeting **2024**
- [Cranwell Ambassador](#) for the Cranwell Ambassadors Program **2023 - 2024**
- Nominee: Outstanding Graduate Student Leader (Student Organization Leadership Awards at Virginia Tech) **2022 & 2023**
- Graduate Assistantship at Virginia Tech **2021 - 2024**
- Graduate Assistantship at The University of Georgia, Athens **2018 - 2021**
- Best [poster](#) for an undergraduate dissertation - Dept. of Ag. Econ. & Agribusiness, Univ. of Ghana **2018**
- [The Asenso Okyere Award for Academic Excellence](#) - Commonwealth Hall, The University of Ghana **2015 - 2016**

Reviewer Duty

- *International Journal of Fruit Science* **2023**
- *Abstract Reviewer - AAEA Annual Meeting* **2025**

Leadership Roles, Service & Professional Development

Virginia Association of Economists	Virginia
<i>Judge - Best Paper Award</i>	<i>2025</i>
Agricultural and Applied Economics (AAEC) Graduate Student Association	Virginia Tech
President	<i>08/2023 - 07/2024</i>
<i>Vice-President</i>	<i>08/2022 - 07/2023</i>
Cranwell International Center	Virginia Tech
Cranwell Ambassador	<i>08/2023 - 05/2024</i>
Ghanaian Graduate Students' Association at Virginia Tech	Virginia Tech
<i>President</i>	<i>03/2023 - 12/2023</i>
The Black Cultural Center	Virginia Tech
Advisory Board Member	<i>08/2022 - 12/2022</i>
The Graduate & Professional Student Senate	Virginia Tech
<i>Senator</i>	<i>08/2022 - 07/2024</i>
Graduate Assistantship Support Task Force Member	<i>05/2022 - 01/2023</i>
Virginia Governor's School for Agriculture	Virginia Tech
<i>Judge - Student Presentations</i>	<i>07/2022</i>
The African Graduate Students' Organization (AGSO @ VT)	Virginia Tech
President & Interim Media Coordinator	<i>08/2021 - 07/2022</i>
Minorities in Agriculture, Natural Resources & Related Sciences	The University of Georgia
<i>Member (MANRRS)</i>	<i>02/2019 - 05/2020</i>
Agriculture, Nutrition and Health Academy Conference	The University of Ghana
<i>Volunteer</i>	<i>06/2018</i>
Alliance for a Green Revolution in Africa (AGRA)	The University of Ghana
<i>Assisting Rapporteur (Knowledge Exchange Workshop on Agricultural Risk Insurance Systems)</i>	<i>05/2018</i>
International Association of Students in Agriculture & Related Sciences	The University of Ghana
<i>Project Committee Deputy head</i>	<i>01/2016 - 01/2017</i>
<i>Project Committee Member</i>	<i>06/2015 - 01/2016</i>
<i>Editorial Board Secretary</i>	<i>01/2015 - 01/2016</i>
EdAid Foundation	The University of Ghana
<i>Volunteer Student-Teacher</i>	<i>06/2016 - 07/2016</i>
Enactus University of Ghana	The University of Ghana
<i>Team Member</i>	<i>01/2015 - 01/2016</i>

Professional Memberships

- Southern Agricultural Economics Association (SAEA) **2023 - Present**
- Agricultural & Applied Economics Association (AAEA) **2022 - Present**
- Ghana Association of Agricultural Economists (GAAE) **2017 - Present**
- Agriculture, Nutrition and Health (ANH) Academy **2017 - Present**

Technical Skills

Proficient: R, Stata, SPSS, L^AT_EX

Working knowledge: Python, Minitab, JMP, Tableau

Competencies: Big Data Analytics, Statistical Modeling, Machine Learning