DANIEL KEVIN ADDO, MS, GStat

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With my 4+ years of relevant work experience, I am seeking to apply advanced quantitative skills to solve real-world challenges in a summer internship. My research interests include causal inference and machine learning.

EDUCATION

University of Utah, *Ph.D. in Population Health Science, Biostatistics* | Salt Lake City, UT — Dec 2025+
Northern Arizona University (NAU), *M.S. Statistics* | Flagstaff, AZ — Apr 2021
Kwame Nkrumah University of Science & Technology (KNUST), *B.Sc. Statistics* | Kumasi, Ghana — May 2017

Courses: Advanced Statistical Inference | Analysis of Survival Data | Applied Bayesian Modelling | Causal Inference | Clinical Trials | Epidemiology: Theory and Methods | Machine Learning | Mathematical Statistics | Multilevel Data Analysis

EXPERIENCE

Study Design & Biostatistics Center, *Graduate Research Assistant* | Salt Lake City, UT — Aug 2021 - Present
- Lead statistician on multiple causal inference and survival analysis projects.
- Consult with statisticians and clinicians to develop robust statistical methods for the estimand of interest.
- Prepare and present detailed statistical reports tailored for both statistical and clinical stakeholders.
- Write and review statistical analysis plans.
- Systematically review relevant statistical, clinical, and computing literature which enhance research projects.
- Develop code to efficiently run statistical analysis using R and SAS.

NAU Department of Mathematics & Statistics, *Part-time Faculty* | Flagstaff, AZ — Jul 2021 - Aug 2021
- Taught Applied Statistics for the summer session to 10+ students.
- Created a simplified lesson plan to keep students informed about expected learning outcomes.
- Employed an adaptive teaching style to enhance student learning.
- Provided regular student-specific feedback to ensure student success.

NAU Department of Mathematics & Statistics, *Graduate Teaching Assistant* | Flagstaff, AZ — Aug 2019 - May 2021
- Taught Algebra, Quantitative Reasoning, and Applied Statistics to 300+ students total.
- Awarded outstanding graduate teaching assistant, Master's level.
- Effectively utilized classroom technology to keep students engaged and enlightened.
- Demonstrated adaptability in transitioning to remote teaching during the COVID-19 pandemic.
- Continuously improved my teaching style based on feedback from course coordinators and students.

ZroNet Africa, *Data Analyst* | Accra, Ghana — Dec 2018 - Aug 2019
- Prepared and presented data-driven insights regularly to to maximize user engagement on the ZroNet app.
- Designed an infographic scorecard using Tableau to visually report key daily metrics to team members.
- Developed a foolproof system to identify and flag data leakages promptly.

KNUST Department of Mathematics *Teaching Assistant* | Kumasi, Ghana — Sep 2017 - Aug 2018
- Organized weekly tutorial sessions in introductory statistics and probability to maximize students' learning.
- Contributed to a published research study comparing statistical techniques for forecasting in time series.

SKILLS

Languages	LaTeX, Quarto, R, SAS
Soft skills	Collaborative Problem Solver, Communicator, Curious Learner, Detail-Oriented, Organized, Team-Player
Software	GitBash, Linux, MS-Excel, MS-Powerpoint, MS-Word, Rstudio, SAS, Tableau,
Certification	Data Literacy (Datacamp), GStat (ASA), Human Subjects Research (Citi Program)

PUBLICATIONS

Xu Y, Derington DG, **Addo DK**, Tao H, Jacobs JA, Mohanty AF, et al. Trends in Initial Antihypertensive Medication Prescribing Among >2.8 Million Veterans Newly Diagnosed With Hypertension, 2000 to 2019. *Journal of the American Heart Association*: e036557. — 2024

Jacobs JA, Derington CG, Zheutlin AR, King JB, Cohen JB, Bucheit J, Kronish IM, **Addo DK**, Morisky DE, Greene TH, Bress AP. Association Between Self-Reported Medication Adherence and Therapeutic Inertia in Hypertension: A Secondary Analysis of SPRINT (Systolic Blood Pressure Intervention Trial). *Journal of the American Heart Association* 13 (3), e031574 — 2024

Zheutlin AR, **Addo DK**, Jacobs JA, Derington CG, Herrick JS, Greene TH, Stulberg EL, Berlowitz DR, Williamson JD, Pajewski NM, Supiano MA, Bress AP. Evidence for Age Bias Contributing to Therapeutic Inertia in Blood Pressure Management: A Secondary Analysis of SPRINT. *Hypertension*, 80(7), 1484-1493. — 2023

Jacobs JA, **Addo DK**, Zheutlin AR, et al. Prevalence of Statin Use for Primary Prevention of Atherosclerotic Cardiovascular Disease by Race, Ethnicity, and 10-Year Disease Risk in the US: National Health and Nutrition Examination Surveys, 2013 to March 2020. *JAMA Cardiology*; 8(5):443–452. doi:10.1001/jamacardio.2023.0228 — 2023

Twumasi-Ankrah S, Pels WA, Nyantakyi KA, **Addo DK**. Comparison of Statistical Techniques for Forecasting Malaria Cases in Ghana. *Biostat Biometric App* J 4(1): 102 — 2019

DISSERTATION

Weighting strategies for balancing treatment groups when estimating per-protocol treatment effects in clinical trials. We are developing statistical procedures to be adopted for the balancing of covariates between treatment groups at corresponding follow-up time points when there is differential loss in follow-up due to non-adherence to treatment protocol, study dropout, or death in clinical trials. — 2025+

The intent-to-treat effect and per-protocol effect of initiating angiotensin-II receptor blockers (ARBs) versus angiotensin-converting enzyme inhibitors (ACEIs) on the rates of cognitive decline: An analysis of the Systolic Blood Pressure Intervention Trial (SPRINT). We emulated a target trial to assess the comparative effectiveness of initiating ARB-based versus ACEI-based antihypertensive therapy on cognitive change rates using data from SPRINT. — 2025+

Characterizing proteinuria as a mediator of effects of chronic kidney disease (CKD) interventions to slow CKD progression We outline the shortfalls of using the conventional causal mediation analysis approach to evaluate surrogate outcomes at patient-level. We propose an alternative trial-level approach which allows for the sharing of information across trials via Bayesian hierarchical modelling. — 2025+

ACHIEVEMENTS

Population Health Sciences Travel Award — Apr 2024
Department of Population Health Sciences, University of Utah

Outstanding Graduate Teaching Assistant, Master's Level — Apr 2021
Graduate School, Northern Arizona University

Johnson-Ratliff Memorial Scholarship — May 2020
Department of Mathematics and Statistics, Northern Arizona University

MEMBERSHIPS

- *American Statistical Association* (**ASA**)
- *American Mathematical Society* (**AMS**)
- *Society of Epidemiologic Research* (**SER**)

CONFERENCES

Participant, *Joint Statistical Meetings, Portland, Oregon* — Aug 2024
Poster Presenter, *Society of Epidemiologic Research, Austin, Texas* — Jun 2024
Participant, *Utah Data Science Day, Salt Lake City, Utah* — Jan 2024

EXTRACURRICULAR

- **Member**, *Student Advisory Committee, Department of Population Health Sciences, University of Utah*
- **Vice-President**, *African Students Association, Northern Arizona Univeristy*
- **President**, *The Navigators of Ghana, Kwame Nkrumah University of Science & Technology*