Ayanda M. Masilela

Doctor of Philosophy

EDUCATION

UNIVERSITY OF WASHINGTON — September 2014 - June 2024

PhD in Geography, *summa cum laude* — **Seattle, WA**

Certificate in Gender, Women, and Sexuality Studies

- Dissertation Title: *Leisures of Responsibility: Spatializing Care and Wellness in Martial Arts Practice*
- Committee: Michael Brown, Kim England, Lawrence Knopp

VIRGINIA TECH — August 2012 - August 2014

Master of Science in Geography, *summa cum laude* — **Blacksburg, VA**

- Master's Thesis Title: *Discerning Neighborhood Characteristics as Contributing Factors for Infant Mortality in the Northern Plains*
- Committee: Korine Kolivras, Stacy Boyer, Sam Cook

INDIANA UNIVERSITY OF PENNSYLVANIA — August 2006 - December 2010

Bachelor of Arts, Geography/GIS and Cartography Concentration, *magna cum laude* — **Indiana, PA**

Dual Major Asian Studies

Robert E. Cook Honors College

- Ronald E. McNair Post-Baccalaureate Achievement Program | 2008-2010
- McNair Honors Thesis: *Digitally Re-mastered: Relearning the Nation's Highway System Through Computer Generated Simulations*
- Hoonrs Thesis Mentor: John Benhart, Jr.

NAGOYA GAKUIN DAIGAKU — March - July 2009

Study Abroad — **Nagoya, Aichii, Japan**

- Japanese Language
- History and Culture
- Karate

UNIVERSITY APPOINTMENTS

UW Northwest Center for Public Health Practice — December 2024 - Present

Geospatial Analyst — **Seattle, WA**

- Report Title (in progress): "Geospatial Analysis of Oregon Vaccine Programs and Provider Experiences." Activity #1 of the *Oregon Health Authority Public Health Department Landscape Assessment* (2025), under the directive of the Oregon Immunization Program
- Analysis of childhood vaccine availability in rural Oregon, featuring the unique combination of ALERT Immunization Information System (IIS) vaccine reporting and All Payer, All Claim (APAC) insurance reporting as measures of service provision.
- These measures are being investigated alongside the CDC's Social Vulnerability Index (SVI) to examine the county-level and census tract-level demographic characteristics of the communities vaccine proviers serve.

UW Continuum College — September 2024 - Present

Instructor — **Seattle, WA**

- C GIS 550 C: GIS In Practice In The Pacific Northwest - Visiting professionals present on their work in a series of six events. Students also finalize their project work, which began in the previous quarter during CGIS 530.
- C GIS 530 C: GIS Project Planning and Implementation - An exploration of information technology project management principles, project planning, and practical strategies for launching community-based GIS projects.
- C GIS 510 C: Principles of Cartography and Thematic Mapping - Foundational course on spatial thinking and visualization. Students learn cartographic principles, information management, and visual design techniques using ArcGIS Pro.

UW Center for Social Science Computation and Research (CSSCR) — January 2018 - June 2024

Research Consultant — **Seattle, WA**

- Provided statistical and software technical support for students and faculty from over two dozen university departments on topics such as data analysis, data interpretation, and research design.
- Fostered collaboration across disciplines and between subject matter experts by offering discipline-specific classes on research issues, such as data collection, survey design, and statistical analysis.
- Mentored subordinates and peers on identifying key performance indicators and research metrics for measuring outcomes across datasets.
- Quarterly Technical Workshops, Special Sessions, and Select Educational Multimedia. Web-based educational materials are under routine use at the UW Department of Geography
    - Geographic Information Systems and Mapping in QGIS (2022-2024)
    - Data Analysis and Mapping in Tableau (2020-2024)
    - Geographic Information Systems and Mapping in ArcGIS (2018-2022)
    - Data Analysis in SPSS (2018 - 2020)
    - Multimedia Field Data Collection and Qualitative Data Analysis in Atlas.ti (2023)
    - Qualitative Data Analysis in Atlas.ti (2019)
    - Data Cleaning and Analysis using SPSS Syntax (2019)

- Resume Building in Tableau (2019)
- Mapping Health Phenomena in QGIS (2018)
- Data Cleaning and Exploratory Analysis in SPSS (2018)
- Published ArcGIS Desktop educational materials on YouTube, a COVID lockdown/hybrid adaptation (2021)
- Published SPSS educational materials on YouTube (2021)
- Published Atlas.ti educational materials on YouTube (2020)

UW Department of Geography — June 2016, Mar 2018 - Feb 2019, Mar 2021 - June 2022

Research Assistant — **Seattle, WA**

- Project Title: *Shifting Spatialities of LGBTQ Life*
- Developed and normalized five decades of primary historical data into GIS-compliant formats, facilitating ongoing research and publication efforts.
- Integrated data veracity measures, Google API geocoding services, and spatial analysis into the Geographic Information Systems workflow, providing new avenues for analysis and cartography.
- NSF Phase PIs: Michael Brown, Larry Knopp, and Bo Zhang

UW Department of Geography — September 2015 - March 2018

Graduate Teaching Assistant — **Seattle, WA**

- GEOG 360: *Principles of GIS Mapping* - an introductory seminar detailing the structure, functionality, and applications of Geographic Information Systems
- GEOG 317: *Geographic Information and Spatial Analysis* - basic analytical techniques using ESRI software and adjacent platforms, including SPSS and Tableau
- GEOG 258: *Digital Geographies* - a comprehensive course on the creation and usage of geographic information online, including website publication using HTML, CSS, and Javascript
- GEOG 277: *Geography of Cities* - an introductory course on urban studies reviewing classics of urban critical theory and contemporary reflections inclusive of Global South urbanization
- GEOG 469: *GIS Workshop* - a project-based course during which students help local agencies achieve their goals of implementing geographic information systems of various kinds in their operations, including web-based publication, spatial analytic, and cartographic techniques

UW Department of Geography — Multiple Appointments

Reader/Grader — **Seattle, WA**

- GEOG 360: *Principles of GIS Mapping* - Technical Support and Training | Spring 2022
- GEOG 381: *Maps and Health* - Technical Support | Summer 2021
- GEOG 123: *Introduction to Globalization* - Assignment and Exam Grading | Fall 2020
- GEOG 317: *Geographic Information and Spatial Analysis* - Substitute TA | Winter 2017
- GEOG 375: *Geopolitics* - Exam Grading | Winter 2017
- GEOG 425: *Qualitative Methodology in Geography* - Assignment Grading | Winter 2015

Virginia Tech Department of Geography — June 2014 - October 2014

Research Technician — **Blacksburg, VA**

- Preliminary analysis using geoprocessing tools, such as *Tabulate Intersection* to calculate land cover types in buffered areas
- Epidemiological spatial analysis using National Land Cover Database raster datasets to examine the local environmental characteristics of Lyme Disease infected individuals.

Virginia Tech Department of Geography — August 2012 - June 2014

Graduate Teaching Assistant — **Blacksburg, VA**

- GEOG 1004: Introduction to Human Geography
- GEOG 4054: Geography of Wine
- GEOG 4074/5074: Medical Geography
- GEOG 4204: Geography of Resources

COMPLEMENTARY EMPLOYMENT & VOLUNTEER SERVICE

Public Health Reserve Corps — January 2025 - Present

Volunteer — **Seattle, WA**

- Community clinic operational assistance and support staff
- Narcan, Harm Reduction, and Bleed Kit Preparation
- Narcan Trainer in-Training (Complete April 7, 2025)

Research Collaboration — January 2020 - October 2020

Research Consultant under Professor Kathie Friedman, PhD — **Seattle, WA**

- Improved the client's capacity for independent qualitative data analysis using Atlas.ti, enabling continued composition of a forthcoming book *The Afterlife of Ethnic Cleansing: Memory, Identity, and Belonging in America's Bosnian Refugee Diaspora*
- Codebook development, querying and data exports in Atlas.ti

Puget Sound SAGE **September 2019**

Independent Contract: GIS Analyst and Cartographer **Seattle, WA**

- Developed a subarea plan in collaboration with community-based organizations by researching land use trends, analyzing demographic data from the US Census Bureau, and preparing recommendations for equitable development surrounding Sound Transit's Link Light Rail site selections in South Seattle.
- Collaboration with residential stakeholders to support strategy development for long-term grassroots advocacy in the impacted neighborhoods.
- Produce 6 cartographic representations of research findings that were distributed as part of the client's educational and strategic initiatives

Health Promotion Research Center, University of Washington **September 2019 - October 2019**

Independent Contract: Workshop Instructor **Seattle, WA**

- Customized five-hour workshop conducted using SPSS syntax. Topics include data cleaning, data dictionary development, data analysis, and visualizations
- Quantitative Research Methods in Health Research
- Preparation for this class resulted in the publication of an online workbook on SPSS syntax, made available through my educational resources website

Northwestern Human Services **July 2011 - July 2012**

Direct Support Professional **Indiana, PA**

- Assist older teenagers and adults who have intellectual/developmental disabilities with daily life goals and efforts towards a more independent life where possible

T&B Planning **May 2010- August 2010**

GIS Analyst Internship **Murrysville, PA**

- Database development of PLANPGH's Pittsburgh Cultural Heritage Plan
- Original data sourcing and editing
- Compilation of historical and modern resources to identify locations and verify conflicting information
- Remote conferencing via Skype

FELLOWSHIPS & SCHOLARSHIPS

The Black Embodiments Studio
The Simpson Center for the Humanities, University of Washington | Winter 2018 - Fall 2019

Joff Hanauer Endowment for Excellence in Western Civilization Graduate Fellowship
The Simpson Center for the Humanities, University of Washington | Fall 2017 - Spring 2018

Howard Martin Research Grant
Department of Geography, University of Washington | Spring 2017

Department of Geography Diversity Scholarship

University of Washington | September 2014

GO-MAP (now GSEE) Doctoral Student Fellowship
University of Washington | Fall 2014 - Spring 2015

Ronald E. McNair Graduate Assistantship
Virginia Polytechnic Institute and State University | Fall 2012 - Spring 2013

Robert E. Cook Honors College Travel Enhancement Fund
Indiana University of Pennsylvania | Spring 2009

Other Scholarships

National Women's Martial Arts Federation Work Study Scholarship
Naperville, IL | March 2016

Pacific Association of Women Martial Artists Work Study Scholarship
Boulder Creek, CA | March 2015

HONORS

Geography Award for Outstanding Teaching Assistant
University of Washington Department of Geography | 2017

American Association of Geographers/National Council for Geographic Education Award
Indiana University of Pennsylvania Department of Geography | May 2011

Exceptional Student Award, African American Cultural Center Fall Pre-Commencement Program
Indiana University of Pennsylvania | December 2010

Provost Scholar
Indiana University of Pennsylvania | Fall 2008

Dean's List
Indiana University of Pennsylvania | Fall 2006 - Fall 2010

CONFERENCES

A. Masilela (2023) "Latitude through Leisure: Exploring Care in the Practice of Martial Arts"
American Association of Geographers Annual Meeting
Virtual | May 23-27, 2023

A. Masilela (2019) "Developing Liberatory Curricula in the Martial Arts: Anti-Racism and Beyond"
Martial Arts Studies Research Network Annual Conference
Chapman University in Orange, CA | May 23-24, 2019

A. Masilela (2019) "Hands that hurt and heal: Trainer as "Care-giver" and Trainee as "Cared-for" in Martial Arts and Self-Defense Practice"
Taking Care: A Conference for Engaging the Politics, Process, and Ethics of Care Work
The University of Washington in Seattle, WA | May 3-4, 2019

A. Masilela (2019) "Considering Context for the Development of Liberatory Curricula in the Martial Arts"
American Association of Geographers Annual Meeting
Washington, DC | April 5, 2019

A. Masilela (2016) "Migration, Segregation, and the Proliferation of Martial Arts in the Western United States: An Overview"
Association of Washington Geographers Annual Meeting
Seattle, WA | May 21, 2016

A. Masilela (2014) "Discerning Neighborhood Characteristics as Contributing Factors to Infant Mortality in the Northern Plains"
American Association of Geographers Annual Meeting
Tampa, FL | April 8, 2014

A. Masilela (2014) "Discerning Neighborhood Characteristics as Contributing Factors to Infant Mortality in the Northern Plains"
3rd Annual College of Liberal Arts and Human Sciences Forum on Human Rights: "Engendering Human Rights"
Virginia Tech in Blacksburg, VA | February 28, 2014
Awarded Best Graduate Student Presentation

A. Masilela (2012). "Conservation in Crisis: A Story of Community Resistance Against Hydraulic Fracturing in the Yellow Creek Conservation Zone"
Southeastern Division of the Association for American Geographers Annual Meeting
Asheville, NC | November 18-20, 2012

A. Masilela, Z. Afshar, T. Iwase and M. Turner (2010). "A GIS-Based Analysis of Nuisance Properties in the Indiana Borough: 2007 & 2009 |An Ongoing Study)".
Undergraduate Research at the Capitol Event, sponsored by the Legislative Office for Research Liaison
Harrisburg, PA | October 5, 2010
Presentation to the Indiana Borough Police and the Borough Planning Department
Indiana, PA | April 24, 2010
5th Annual Undergraduate Scholars Forum, Indiana University of Pennsylvania
Indiana, PA | April 1, 2010
Tied 1st for *Best Poster* from the College of Humanities and Social Sciences

Student Representative at the Pennsylvania State System of Higher Education Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, and Allies (PASSHE LGBTQIA) Consortium
Penn State University
State College, PA | October 30-31, 2009

A. Masilela (2008). "Digitally Re-mastered: Relearning the Nation's Highway System Through Computer Generated Simulations"
The 16th Annual University of Buffalo National McNair Research Conference
SUNY Buffalo, NY | July 2008
McNair Scholars Program Summer Research Symposium, Indiana University of Pennsylvania
Indiana, PA | June 2008

GUEST LECTURES

"Preparing for Interviews: Lessons from the Field and YouTube Video Production" and "Introduction to Atlas.ti"
University of Washington Department of Geography | Spring 2023
Presented in GEOG 525: *Qualitative Methods*

"Food Justice, Housing Justice, Economic Justice… Leisure Justice?"
University of Washington Department of Geography | Winter 2021
Presented in GEOG 377: *Urban Political Geography*

"Urban Spatial Reclamation through the Body: Sport and Leisure as Liberatory Praxis Among Marginalized Groups"
University of Washington Department of Geography | Winter 2018
Presented in GEOG 476: *Women and the City*

"Gendered Discourses of Public Space: Utilizing softball as liberatory praxis and a conduit for feminist political organizing"
University of Washington Department of Geography | Winter 2017
Presented in GEOG 476: *Women and the City*

"Careers in GIS: Selling yourself in a world of non-geographers"
University of Washington Department of Geography | Spring 2016
Presented in GEOG 360: *Principles of GIS Mapping*

RESEARCH PROFICIENCIES

Qualitative Methods

Software: Atlas.ti

- Semi-Structured Interviews
- Participant-Observation
- Landscape Characteristic Analysis
- Conceptual and Relational Content Analysis

Geographic Information Systems

Software: QGIS, ArcGIS Pro, ArcGIS (9.2 - 12.0)

Field Data Collection: Fulcrum, QField

Web-based: ArcGIS Online, CartoDB, Google MyMaps

- Spatial Analysis
- Spatial Statistics
- Network Analysis
- American Community Survey
- US Census TIGER/Line Geodatabases
- University of Wisconsin Neighborhood Area Deprivation Index Atlas

Quantitative Methods

Software: SPSS, Tableau, JMP

- Descriptive, Inferential, Exploratory, and Predictive Analyses
- Likert Scales and Reliability Testing

Data Visualization and Dashboards

Software: Tableau, IBM Cognos Analytics, ArcGIS Experience Builder

Programming and Syntax

- SPSS Syntax: Intermediate
- HTML and CSS: Intermediate
- Python: Beginner
- JavaScript: Beginner

Multimedia Editing and Publishing

Software: Audacity, Shotcut, OBS Studio, YouTube, Website Construction

- Audio Capture
- Audio Mixing
- Video Capture
- Video Editing
- Documentary Photography
- Web-based multimedia publication

DEPARTMENTAL SERVICE

Online Educational Resource Repository and YouTube Channel
CSSCR and the UW Dept. of Geography | *Summer 2018 - Present*

https://students.washington.edu/ayandm/tutfiles/
Ongoing production of written technical tutorials and instructional YouTube videos for students to self-pace through the initial stages of learning statistical and GIS software suites. These tutorials include ArcMap, Atlas.ti, QGIS, SPSS, and Tableau.

Geography Graduate Students Association Co-President
University of Washington Department of Geography | *Fall 2019 - Spring 2021*

Colloquium Committee
University of Washington Department of Geography | *Fall 2016 - Spring 2018*

GO-MAP (now GSEE) Diversity Scholar
UW Office of Graduate Student Equity and Excellence | *Fall 2014 - Spring 2015*

Coffee Hour Committee
University of Washington Department of Geography | *Fall 2014 - Spring 2015*

PROFESSIONAL SOCIETIES

Washington GIS Association
February 2025 - Present

American Association of Geographers
2014 - 2024

The Martial Arts Research Network
October 2018 - Present

The Relational Poverty Network
December 2014 - Present

Gamma Theta Upsilon: The International Geographic Honor Society
2008 - 2010

Phi Eta Sigma: National Honor Society
Spring 2007 - August 2010

VOLUNTEER & SERVICE RESEARCH

Upward Bound Math and Science, Indiana University of Pennsylvania **January 2022 - May 2022**

Statistics and GIS Consultant **(Remote) Seattle, WA**

- Assist UBMS in the composition of their grant proposal for federal funding (2022 cycle)
- Interface data from the US Census and the Pennsylvania Department of Education using SPSS and QGIS
- Create data visualizations in Tableau

Coalition for a Healthy County **June 2011 - June 2013**

GIS and Real Map Analyst Internship **Murrysville, PA**

- Preparation of community education materials detailing the state of Marcellus Shale drilling practices
- Land use policy assessment
- Routine stakeholder collaboration with local community organizations

Upward Bound Math and Science, Indiana University of Pennsylvania **August 2011 - June 2012**

Statistics and GIS Consultant **Indiana, PA**

- Assist UBMS in the composition of their grant proposal for federal funding (2012 cycle)
- Interface data from the US Census and the Pennsylvania Department of Education using ArcMap
- Comparative analysis of change over time and the production of textual reports