ANDREW M CAMERON



CONTACT

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EDUCATION

VIRGINIA COMMONWEALTH UNIVERSITY

Master of Environmental Studies GIS Post-Baccalaureate Certificate 2024

MIDDLEBURY COLLEGE

Master of Arts, Spanish 2015

SKILLS

- → ArcGIS Pro & ArcGIS Online
- → R & RStudio
- → Cartographic Visualization
- → Data Wrangling & Management
- → Arcade
- → Suitability Analysis
- → Change Detection
- → Bilingual English/Spanish
- → Geodatabase Design & Management
- → Esri tools

Survey123 (Connect); Web Maps; Field Maps; Experience Builder; Model Builder; Dashboards

Working Knowledge

- → Python/ArcPy
- → PostgreSQL & PostGIS
- → SQL
- → Remote Sensing
- → ArcGIS Enterprise
- → Statistical Analysis

ABOUT ME

With over a decade of professional experience in education, I made a strategic pivot to environmental geospatial technology, leveraging strong communication and problem-solving skills. Bilingual and skilled in GIS, data management, and analysis, I am passionate about applying my technical expertise to projects that support environmental research, promote sustainability and equity, and contribute to impactful climate action.

WORK EXPERIENCE

GEOSPATIAL RESEARCH ANALYST

Virginia Commonwealth University (Jan. 2024 - present)

- Preparation of technical project summaries and metadata
- GIS data sourcing, acquisition, conversion, and integration
- Development of spatial web applications to communicate data effectively for stakeholders
- Led model ground-truthing project, coordinating logistics, site random sampling, data collection, post-processing, and the preparation of a comprehensive research brief
- Utilizing Python and Arcade scripting to automate data tasks and improve web map functionality

ENVIRONMENTAL DATA ANALYST

Independent Consultant (Dec. 2023-present)

- Optimizing R scripts for environmental data processing
- Implementing statistical models for environmental data analysis
- Producing clear, dynamic, publication-ready data visualizations and map layouts with R and ArcGIS Pro
- Preparing comprehensive technical documentation, including data specifications, user requirements, and step-by-step procedures for adapting to new data

GIS ANALYST INTERN

City of Newport News (May 2023 - May 2024)

- Designed and maintained geodatabases in ArcGIS, integrating diverse data sources and applying advanced database concepts
- Developed and integrated GIS applications, including Field Maps, Survey123, and Experience Builder for interactive web apps
- Conducted complex spatial analyses and mapping as lead analyst for city's gun violence prevention initiative
- Scripting in R and Python to streamline GIS data preparation, management, and analysis

HONORS & AWARDS

MOST OUTSTANDING GRADUATE STUDENT

Virginia Commonwealth University Center May 2024 for Environmental Studies Richmond, VA

Awarded at the completion of my graduate studies in recognition of academic performance, professional development, and contributions to the program

GIS WEB APP CONTEST - 1ST PLACE

Hampton Roads GIS Day Conference

Nov 2023

Norfolk, VA

Award for best Web App voted on by attendees of the GIS Day conference at Old Dominion University in recognition of our internal Newport News Gun Crime application

BEST GEOGRAPHIC ANALYSIS

Virginia Association for Mapping and Land Information Systems Conference

Apr 2023

Harrisonburg, VA

Issued by Virginia Association for Mapping and Land Information Systems at the VAMLIS 2023 GeoCon conference in recognition of my poster "Using GIS to Identify Habitat for an Endangered Coastal Songbird"

PRESENTATIONS

"OPTIMIZING SITE SELECTION FOR (SUB)URBAN AGRICULTURE: HOW GEOSPATIAL ANALYSIS WAS APPLIED TO BALANCE EQUITY, SUSTAINABILITY, AND LONGEVITY IN RICHMOND CITY, VA"

APA Virginia Conference

Jul 2024

Williamsburg, VA

"USING URBAN LAND EVALUATION AND SITE ASSESSMENT (ULESA) TO IDENTIFY IDEAL LOCATIONS FOR URBAN AGRICULTURE"

Miama Valley Section of APA Ohio

Apr 2024

Virtual

Co-presenter with Dr. John Jones. Presentation on urban agriculture and the uLESA model aimed at planning professionals

"LITTLE PATCH, BIG DIFFERENCE: HOW SMALL GREEN SPACES CAN TAKE ON BIG IMPORTANCE FOR MIGRATING BIRDS IN DEVELOPED AREAS"

Newport News Green Foundation "Green

Apr 2023

Drinks" Series

Newport News, VA

Invited public talk on the importance of small green spaces for migratory birds in urban areas, utilizing NLCD data, eBird data, and two local case studies to make the point $\frac{1}{2}$

PUBLICATIONS

"MAPPING A GREENER FUTURE: HOW GIS ENHANCES URBAN AGRICULTURE INITIATIVES"

Urban Agriculture Magazine, no. 41

Apr 2024

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This article uses Richmond, Virginia, as a case study tohighlight how GIS technology can enhance urban agricultureinitiatives by optimizing site selection and supportingsustainable, equitable project planning