

Jeremy Kristopher Andre

Data Visualization & Environmental Analytics



Centreville, VA



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(603) 921-8123

PROFILE

Data visualization specialist and environmental analyst combining scientific expertise with modern development skills. Proven track record of developing full-stack environmental monitoring platforms processing 5,000+ data points with real-time analytics. Specialized in GIS integration, data pipeline automation, and creating interactive visualization dashboards for complex ecological datasets.

PROFESSIONAL EXPERIENCE

ONESTONE Avian Mortality Platform

2023 - Present

Lead Developer

DMV Region

- Architected full-stack GIS platform processing 5,000+ wildlife incidents with custom clustering algorithms
- Implemented multi-layer caching system reducing load times by 60% and optimizing mobile performance
- Developed automated species classification and building recognition systems
- Integrated Firebase, OpenCage API, and Cloudinary for robust data management
- Created comprehensive analytics dashboard for temporal and spatial pattern analysis

Fairfax Urban Biodiversity Dashboard

2023

Project Lead

Fairfax County

- Engineered Python-based ETL pipeline for processing iNaturalist research-grade observations
- Created interactive D3.js visualizations for real-time ecosystem monitoring
- Implemented automated data collection reducing manual entry time by 90%
- Built custom GIS solutions using QGIS and Leaflet.js for spatial analysis
- Developed machine learning algorithms for species classification and pattern detection

Independent Research Assistant

2021 - 2023

George Mason University

Fairfax, VA

- Processed and analyzed >4,000 botanical specimens for research database
- Implemented data validation systems using Google Suite conditional formatting
- Collaborated on ecological pattern analysis and anthropogenic impact research
- Developed standardized protocols for specimen annotation and digitization

Self-Employed Designer

Business Analytics & Management

2020 - Present

Remote

- Grew customer base to 918+ through strategic marketing and customer support
- Managed 1,568+ annual transactions with precise financial recording
- Optimized operations using advanced Excel functions, reducing documentation time by 83%
- Developed comprehensive financial tracking system using pivot tables and Power Query

EDUCATION

Bachelor of Science in Biology

May 2022 George Mason University

Fairfax, VA

TECHNICAL EXPERTISE

Data Engineering:	ETL Pipelines, Real-time Processing, Data Validation, Pattern Detection
GIS & Mapping:	QGIS, Leaflet.js, Custom Clustering, Geospatial Analysis, OpenCage API
Development:	JavaScript (ES6+), Python (Pandas, NumPy), HTML5/CSS3, REST APIs
Visualization:	D3.js, Chart.js, Interactive Dashboards, Real-time Analytics
Database & Cloud:	Firebase, Cloudinary, Google Cloud Platform, Data Optimization
Tools & Methods:	Git, VS Code, Power Query, Advanced Excel, Statistical Analysis

RESEARCH EXPERTISE

- **Environmental Analysis:** Urban ecology assessment, biodiversity monitoring, habitat analysis
- **Data Collection:** Standardized protocols, quality assurance, metadata management
- **Scientific Methods:** Research design, statistical analysis, pattern recognition
- **Documentation:** Technical writing, research documentation, process standardization

PROFESSIONAL DEVELOPMENT

• Excel: Advanced Formulas and Functions (Office 365)	August 2022
• Microsoft Access Essential Training	July 2022
• Excel Essential Training (Office 365)	June 2022

PROFESSIONAL SKILLS

- Data Analysis, Visualization, and Management
- Financial Operations (A/P, A/R, Bookkeeping)
- Technical Documentation and Research
- Customer Relations and Communication