

Ryan Charles Lingo, M.A.

www.linkedin.com/in/ryanclingo www.ryan-lingo.com

PROFESSIONAL EXPERIENCE

GIS Database Engineer January 2025 – September 2025
Excellent Technology Solutions (XTS) – United States Geological Survey Remote

- Developed Python-based geoprocessing tools for transportation, graphics, and spatial datasets, automating workflows that supported national geospatial programs
- Managed and optimized geodatabases with ArcGIS Enterprise, Workflow Manager, and PostgreSQL/pgAdmin, leveraging traditional and branch versioning
- Built replica sync automation script with validation counts and automated email reporting; supported EC2 monitoring and sync integrity
- Contributed to Terraform-driven deployments of EC2 instances with mission-critical software
- Collaborated in Agile workflows using Jira and GitLab for task tracking, source control, and code reviews

Digital Marketing and Systems Specialist December 2023 – January 2024
The Lingo Group Inc. Greater Philadelphia Area

- Led content creation, layout planning, and design input for a modern website to enhance traffic, user engagement, and lead generation
- Utilized Adobe Creative Suite, Microsoft Visio, and Jira to streamline project management and track deliverables
- Developed automation tools, including an EZ Pass transponder tracking system and inventory management solutions using Power Apps and Microsoft Lists
- Redesigned company logos and integrated them across digital platforms to strengthen online presence
- Implemented SEO strategies to improve search engine visibility and support marketing efforts

GIS Developer/Automation Support October 2020 – August 2023
Leidos Inc. – Federal Aviation Administration Washington, DC

- Developed geoprocessing workflows and automated data analysis using Python and AWS tools, enhancing data extraction and management
- Conducted data validation and user-acceptance testing for geospatial applications, ensuring functionality met requirements
- Created data visualizations using ArcGIS, Tableau, and Power BI, delivering actionable insights to stakeholders

Geographer February 2019 – October 2020
United States Census Bureau Washington, DC

- Designed Python tools to support spatial analysis and data quality control for nationwide geographic programs
- Developed and implemented quality control systems to meet operational schedules and standards
- Completed advanced courses in ArcPy, Python, and Machine Learning to enhance geospatial analysis capabilities

Graduate Assistant August 2016 – May 2018
Department of Geography and Environmental Planning Towson, MD

- Assisted with GIS lab grading and research projects, including mapping land surface temperature for city planning
- Provided support for courses in GIS, Geography, and Climatology, contributing to academic development

Geospatial Research Consultant May 2017 – September 2017
Science Systems and Applications Inc., NASA DEVELOP National Program Greenbelt, MD

- Developed a global resiliency monitoring tool based on precipitation analysis for the Niger Water Resources project

Paleoclimatology Intern - Paleogeosciences Cataloguer May 2014 – September 2014
NOAA - World Data Center for Paleoclimatology Boulder, CO

- Collected and cataloged paleogeoscience resources for global database integration, authoring over 200 resource descriptions

EDUCATION

Master of Arts - Geography and Environmental Planning
Towson University - Towson, Maryland

Bachelor of Science - Geology
California University of Pennsylvania - California, Pennsylvania

Bachelor of Science - Environmental Earth Science
Minor: Meteorology

TECHNICAL SKILLS

GIS Software & Platforms ArcGIS Enterprise, ArcGIS Pro, ArcGIS Desktop, ArcGIS Online, ArcGIS Workflow Manager, QGIS, TerrSet	Programming & Automation Python, ArcPy, SQL, Terraform, JavaScript, HTML, CSS
Spatial Database Management PostgreSQL/PostGIS, pgAdmin, Oracle SQL Developer, TOAD, Geodatabase Design, Branch Versioning	Cloud & Infrastructure Amazon Web Services (AWS), EC2, Terraform, Cloud-based GIS Workflows
Data Analysis & Visualization Tableau, Power BI, SPSS, Geoprocessing Workflows, Spatial Analysis, Data Quality Control	Python Libraries & Tools ArcPy, PANDAS, Fiona, BOTO3, arcgis, urllib3, regex, json, git
Project Management & Collaboration JIRA, GitLab, GitHub, Agile Workflows, Microsoft Office 365, SharePoint, Teams	Data Formats & Standards Raster, Vector, KML, GeoJSON, Shapefile, XML, JSON-LD, Geospatial Data Standards

CERTIFICATIONS

AWS Certified Cloud Practitioner Foundational – December 2023

PUBLICATIONS & RESEARCH

Tomlin, J., El-Behaedi, R., Lingo, R., McCartney, S., Thieme, "Stress and Duress in the Sahel: Building Resiliency in Niger" Earthzine August (2017)

Anderson, David M., K. Horlick, and R. Lingo. "Share Your Geoscience Resources in the EarthCube Paleogeoscience Catalog." Past Global Changes, PAGES June (2014): 1, Web.

Conference Presentations: Long-term trend analysis and changes to the mean and variability of temperature in Pennsylvania from 1983 to 2014; American Association of Geographers, 2017

Research Projects: Baltimore City Urban Heat Island: A Problem Based Approach; Middle Atlantic Division of the American Association of Geographers, 2016