

JACKSON BOUFFARD

State College, PA • jacksonbouffard@gmail.com • linkedin.com/in/jacksonbouffard

SKILLS

GIS & Analysis: ArcGIS Pro, ArcGIS Online, QGIS, Spatial Analyst, ModelBuilder, geodatabase management, cartography, Claude Code

Programming & Data: Python (arcpy, pandas), SQL, JavaScript, data visualization, ETL workflows, QA/QC

Environmental: Stormwater analysis, Soil analysis, watershed delineation, BMP ID & assessment, water quality monitoring, NPDES familiarity

Software: AutoCAD, Microsoft Office, Google Earth Pro, Leaflet, web mapping

EXPERIENCE

Geographic Information Systems (GIS) Technician

Penn State Agriculture & Environment Center • University Park, PA • July 2025 – Present

- Developed automated web mapping tool that provides customized watershed assessment maps to Conservation Districts throughout Pennsylvania.
- Produced stream tributary address system, naming over 1,500 previously unnamed tributaries.
- Led stormwater education workshops resulting in 60 rain barrel installations across Centre County.
- Developed automated financial reporting, reducing staff workload and improving accuracy.
- Built remote-sensing script to assess riparian health on streambanks, mapping over 700 miles of water.

Geographic Information Systems (GIS) Intern

Penn State Agriculture & Environment Center • University Park, PA • Oct 2023 – July 2025

- Automated BMP prioritization using Python; built ArcGIS Dashboard displaying 6,000+ ranked opportunities for staff.
- Delivered all GIS resources for Coldwater Conservation Plan of Shavers Creek (Huntingdon County). Including mobile field collection, figures, and maps.

Stormwater Intern

Montgomery County Conservation District • Collegeville, PA • May 2023 – Aug 2023

- Assisted with stormwater management plans for NPDES compliance; conducted field inspections of active and complete construction sites.
- Conducted visual stream assessment on multi-mile reach using EPA rapid bioassessment protocol.

PROJECTS

WatershedGuesser: Geography puzzle game where users guess watershed based on clues.

MLB Blackout Zones: Web-scraped cable broadcast data to map MLB blackout zones by ZIP code.

Land Use Impact Study: Modeled relationship between land use and stream health using geo regression.

EDUCATION

B.S. Environmental Resource Management, Minor in Geographic Information Systems (GIS)

Pennsylvania State University • University Park, PA • 2025 • GPA: 3.8

Relevant Coursework: Stormwater Analysis & Design, Soil Science, Spatial Data Visualization, Python, SQL

CERTIFICATIONS

Pursuing GISP Certification