

Griffin O'Neill

Avon, IN | griffin.a.oneill@gmail.com | 317-430-8254

GitHub: <https://github.com/one-ill-griff>

Portfolio: portfolio-iota-lyart-66.vercel.app

Projects

Climate Exposure & Vulnerability Analysis Tool

Python, Pandas, GeoPandas, Rasterio, Streamlit

- Built an end-to-end geospatial data pipeline integrating U.S. Census ACS vulnerability metrics with floodplain and extreme heat exposure data
- Designed a canonical metrics table enabling scenario-based filtering and comparison across 250+ census tracts
- Developed an interactive Streamlit dashboard for exploring risk scenarios and exporting geospatial results
- Produced reproducible outputs using Parquet and GeoJSON with modular, version-controlled processing scripts

FitLog: Android Fitness Tracking Application

Java, Android Studio, SQLite

- Developed a multi-screen Android application for workout logging, routines, personal records, and progress tracking
- Designed and implemented a normalized SQLite schema supporting workouts, exercises, streaks, and achievement logic

- Implemented gamification systems (streaks, achievements) to encourage long-term user adherence
- Applied MVC architecture and Git-based version control to manage a multi-phase software project

Oak Seedling Environmental Data Analysis

Python, Pandas, Data Visualization

- Cleaned, transformed, and analyzed longitudinal ecological field data on oak seedling growth and survivorship
- Converted raw observational datasets into analysis-ready formats for statistical comparison
- Generated visual summaries to identify growth trends and potential environmental stressors

Interactive Portfolio & Visualization Site

Next.js, React, JavaScript, HTML/CSS

- Built a responsive portfolio site to showcase technical projects, analyses, and visualizations
- Designed reusable UI components and animations to improve clarity and recruiter engagement
- Integrated project documentation, screenshots, and external links for technical review

Technical Skills

- **Languages:** Python, Java, SQL, JavaScript, C++, HTML/CSS
- **Data & Analytics:** Pandas, NumPy, GeoPandas, raster data processing, data cleaning, metrics pipelines
- **Visualization:** Streamlit, Matplotlib, interactive dashboards
- **Tools & Frameworks:** Git, GitHub, Android Studio, SQLite, VS Code, Docker
- **Domains:** Geospatial analysis, climate risk metrics, environmental data systems, fitness tech

Education

DePauw University - Greencastle, IN

B.A. Computer Science, Minor in Geology - May 2026

- GPA: 3.49 / 4.0
- Dean's List (4 semesters)
- Environmental Fellowship Program (four-year interdisciplinary honors cohort)
- Sigma Alpha Epsilon Fraternity

Leadership & Engagement

- Sustainability Chair, Sigma Alpha Epsilon: Led initiatives promoting environmentally responsible practices and organized sustainability education events
- Environmental Fellowship Program: Interdisciplinary coursework, leadership development, and applied environmental practicum experience
- Green Greeks Club: Supported sustainability-focused initiatives within Greek life