CALEB GRANT

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PROFESSIONAL SUMMARY

Versatile Data Engineer and Full-Stack Developer with a strong foundation in building scalable, automated data systems and web applications. Proven experience leading ETL pipeline design, REST API development, geospatial and relational data architecture, and cloud-native workflows using Python, Django, PostgreSQL/PostGIS, and AWS. Formerly rooted in environmental consulting, now focused on joining technical teams with strong data cultures, where data quality, integrity, and reproducibility are treated as engineering priorities, not afterthoughts.

TECHNICAL SKILLS

LANGUAGES: Python, SQL, JavaScript, HTML/CSS, Bash, PowerShell
DATABASES: PostgreSQL/PostGIS, DuckDB, MySQL, SQL Server, SQLite, MongoDB, Redis
DATA ENGINEERING & ORCHESTRATION: AWS (Lambda, Glue, S3), GCP (Cloud Functions, Cloud Storage), Apache Airflow, Apache Spark, dbt, cron, GitHub Actions
FRAMEWORKS & BACKEND TOOLS: Django, Django REST Framework, Flask, FastAPI, Celery, Docker, PyPI
FRONTEND & VISUALIZATION: Plotly, Dash, Streamlit, Shiny (Python), HTMX, JavaScript, Bootstrap, Power BI, Tableau
TESTING & DOCUMENTATION: pytest, tox, Quarto, MkDocs, Sphinx, Markdown, Git, Mercurial

FEATURED PROJECTS

COASTAL MORPHOMETRICS ANALYSIS TOOLKIT (CMAT)
- Developed and deployed an interactive dashboard to visualize coastal profile time series and morphometric statistics.
- Built the entire technology stack, from geospatial database to frontend visualization.
- Inventor on U.S. Patent Application No. 18/115299 (filed February 28, 2023; patent pending).

CSTORIES.APP [https://cstories.integral-corp.com]
- Created interactive, event-driven infographics and static web components to support marine renewable energy planning.
- Translated complex datasets into engaging, stakeholder-friendly narratives.

MARINEENERGY.APP [https://marineenergy.app]
- Built static web components, backend data systems, and ETL pipelines to integrate environmental, geospatial, and regulatory datasets.
- Synthesized complex scientific topics for broader accessibility and regulatory streamlining.

EXPERIENCE

GSI ENVIRONMENTAL INC.　　　　　　　　　　　　　　　　　　　　　　　　Remote
Data Engineer　　　　　　　　　　　　　　　　　　　　　　　October 2023 – Present

- Modernized internal data infrastructure using PostgreSQL/PostGIS, Python, and SQL, enabling scalable, high-integrity workflows across multi-disciplinary environmental projects.
- Designed and automated ETL pipelines with AWS Lambda, Glue, and S3, reducing manual data handling by over 70%.

- Built and deployed a RESTful API for 811 utility locate workflows using Django REST Framework, Celery (for async tasks), Celery Beat (for scheduling), and Redis for message brokering—all containerized with Docker.
- Developed internal web applications to improve data accessibility and stakeholder engagement using a Django/Redis/Celery/Docker stack, with a frontend built using HTML, CSS, JavaScript, HTMX, and Bootstrap.
- Built a modular EDD (Electronic Data Deliverable) QA/QC web application powered by reusable data dictionaries, enabling non-technical users to validate incoming datasets before they enter production pipelines.
- Created and maintained daily data ingestion workflows from third-party APIs using Python for extraction and QC, PostgreSQL for storage, and cron for scheduling.
- Authored internal documentation and reproducible data reports using Quarto, incorporating Markdown, Python, SQL, R, and shell scripts to support knowledge sharing and transparency.
- Mentored junior team members and helped launch a formal data services team, contributing to a stronger data-driven culture across the organization.

INTEGRAL CONSULTING INC.   Remote
Data Manager / Analyst   January 2023 – September 2023
Data Manager   March 2020 – December 2022

- Designed and maintained ETL pipelines to acquire, clean, and transform environmental data for geospatial, statistical, and engineering analyses.
- Developed full-stack web applications for data ingestion, validation, and visualization using Python, Django, and PostgreSQL.
- Led efforts to modernize legacy data systems, converting historic formats into scalable, query-optimized database models.
- Performed extensive QA/QC on datasets and implemented automated integrity checks to ensure data accuracy across multi-disciplinary projects.
- Created and maintained technical documentation for internal workflows and external deliverables, using tools like Quarto, Markdown, and Git.
- Produced ad-hoc reports and dashboards for internal stakeholders and clients using SQL, Polars/Pandas/GeoPandas, and Power BI.
- Conducted peer code reviews and mentored team members on data processing best practices and reproducibility standards.
- Supervised and supported two junior data managers, overseeing task prioritization, performance, and delivery across projects.

PBS ENGINEERING AND ENVIRONMENTAL   Richland, Washington
Geographic Information Systems (GIS) Developer / Project Geologist   May 2018 – February 2020

- Led data acquisition efforts in regulated field environments, integrating real-world measurements into centralized systems.
- Prepared technical reports, data summaries, and presentation materials to support regulatory submissions and client deliverables.
- Maintained and inspected treatment systems and instrumentation as part of ongoing remediation efforts.
- Processed and structured environmental field data for analysis and database submittal using Excel, Access, and SQL.
- Designed and deployed custom geospatial applications and content management tools to support internal teams and clients.
- Automated spatial data workflows using ArcGIS, Python, PowerShell, and SQL to improve project efficiency and data accuracy.
- Developed interactive dashboards and visualizations using Power BI and JavaScript.
- Built RESTful Flask API endpoints to enable cross-platform data access and integration with external systems.
- Maintained GIS content across SharePoint, geodatabases, and internal tools to support cross-discipline teams.

FREESTONE ENVIRONMENTAL SERVICES INC.   Richland, Washington
Geographic Information Systems (GIS) Specialist / Staff Geologist   April 2017 – April 2018

- Served as lead GIS Specialist, overseeing company GIS systems and providing technical support for spatial data workflows and hardware/software maintenance.
- Supported environmental assessments by procuring project-specific geospatial data, conducting field data collection, and performing historical record reviews.
- Developed standardized map templates, site plans, and geoprocessing workflows using ArcGIS ModelBuilder, improving delivery speed and consistency across projects.
- Automated spatial analysis and reporting tasks using Python scripting and database integration.
- Managed small project teams to complete deliverables under tight deadlines and complex regulatory requirements.
- Collaborated with clients during RFP and planning phases to ensure technical expectations were clearly defined and successfully met.
- Conducted remote sensing and ground-truthing surveys for site characterization and remediation planning.
- Oversaw well and borehole drilling operations on the Hanford (NPL) Site, preparing detailed logs and documentation for use in regulatory reporting.
- Performed QA/QC on spatial and tabular data, supporting environmental compliance, groundwater monitoring, and remediation tracking efforts.

WASHINGTON STATE UNIVERSITY, SCHOOL OF THE ENVIRONMENT   Pullman, Washington
Teaching Assistant & Research Assistant – Environmental Geology   November 2015 – June 2016

- Supported undergraduate instruction in environmental geology through field discussions on regional hazards and Quaternary formations.
- Conducted research on ancient sand dunes in the Eastern Snake River Plain using remote sensing and grain size analysis (sieve and laser diffraction).
- Managed lab workflows, authored geospatial visuals, and coauthored abstracts presented at the 2016 & 2017 GSA Rocky Mountain Section Conferences.

EDUCATION

CONTINUED EDUCATION
The Complete pytest Course [PythonTest]   February 2025
The Complete Hands-On Introduction to Apache Airflow [Udemy]   February 2023
Docker Mastery: with Kubernetes +Swarm from a Docker Captain [Udemy]   May 2022
Full stack web development and AI with Python (Django) [Udemy]   July 2021

WASHINGTON STATE UNIVERSITY   Pullman, Washington
Bachelor of Science in Geology, Minor in Geospatial Analysis   August 2012 – December 2015

SOUTH PUGET SOUND COMMUNITY COLLEGE   Olympia, Washington
Associate of Arts, Running Start Program   September 2010 – June 2012