

Part-Time Python Developer Needed for Automated Web Data Aggregation Tool

I am seeking an experienced Python developer to upgrade and automate an existing web scraping script. The script collects structured data from a large, public-facing web platform with regionally segmented content, using search endpoints and geographic subdivisions. The existing codebase is functional nationally but requires transformation into a production-ready application that runs automatically on a set schedule across multiple U.S. regions, aggregates the results, and organizes output files for later analysis.

Your Responsibilities:

- Refactor and modularize the current Python codebase to support recurring automated runs.
- Implement a scheduling system (e.g., cron jobs, task scheduler, or similar) so that data collection can run weekly, without manual intervention.
- Build logic to manage and organize output files, including grouping results by run date and region, and handling data aggregation and storage.
- Integrate robust logging and error-handling throughout the workflow to ensure reliability and transparency.
- Ensure that the script can run in a headless/cloud environment and is resilient to interruptions, errors, and basic anti-bot protections.
- (Optional) Propose and implement optimizations to maximize efficiency and minimize operational/API costs, such as result caching and rate limiting.



Required Skills: Exceptional at web scraping deeply nested content in Python

- Experience with asynchronous programming and headless/cloud-based scraping.
- Familiarity with interacting with search endpoints/APIs and parsing complex, nested JSON data structures.
- Proficient in structured data output (CSV, JSON), file management, and aggregation across multiple runs.
- Demonstrated ability to implement comprehensive error handling, logging, and resilient automation workflows.
- Comfortable with scripting and implementing scheduled/automated jobs (cron, Airflow, or similar tools).
- Ability to independently test, debug, and document code.
- **Bonus/Preferred:** Familiarity with cloud deployment (AWS, GCP, Azure) and containerization (Docker).

Please submit:

- A brief description of your relevant experience, particularly related to scraping, automation, and large-scale data aggregation.
- Examples of similar Python projects (GitHub, portfolio, or code samples).
- Your hourly rate and availability for ongoing, part-time work (estimated 5–10 hours/week).
- Confirmation you are comfortable working on a project involving large-scale data extraction for analytical use.