



Software Engineering Challenge!

Our system ingests search term data from Google Adwords into a S3 Data Lake, one possible format is CSV.

Once ingested we score each search term with its Return On Ad Spend (ROAS).

$$\text{ROAS} = \text{conversion value} / \text{cost}$$

With the example search term CSV (software-challenge.csv) file provided write a **python daemon** that:

1. Monitors a directory for new csv files.
2. When a file arrives, parse it and calculate the ROAS for each search term and write out a new csv file.
3. Output file format :

a. "processed/\$currency/search_terms/\$timestamp.csv" of the format:

search_term, clicks, cost, impressions, conversion_value, roas

Be sure to demonstrate the following:

1. How to handle corrupt files or individual rows and a high throughput scenario
2. Dependency Management, Packaging and Deployment
3. Maintaining code quality
4. Incorporate as many of the SOLID principles into your submission as possible (it's fine to be verbose where normally you wouldn't)

Upon successful review of your submission you will be invited to an onsite interview.

Please submit your code in the form of a git repository.

Good luck!