ICTC – Junior Data Analyst Assignment

Saturday, September 7th, 2019

Assignment Scope and Requirements

Using whichever software that you feel comfortable with and have access to, please complete the following assignment.

   1. Please complete a web scraping of at least 50 "data scientist" job posts. Postings may come from LinkedIn, Indeed and/or Monster. Please save your results and store them in a .csv file.

   2. Please clean and process the job posts and use text mining to identify what you believe to be "key" or "critical" skills for this occupation. You can use text, tables and/or visualizations to communicate your findings.

   3. Please explain which classification or clustering algorithms you feel are best used in order to extract "key" or "critical" skills from those job posts.

Please write a short synopsis (no more than 2 paragraphs) of what implications you feel the *ability to identify in-demand skills across occupations* may produce for the workforce and economy (i.e. help displaced workers find new career opportunities, help academic institutions prepare relevant programs, etc.). Also, write a paragraph on the specific challenges we all face when scraping job boards for employment data.

Timelines: This assignment is designed to test the job scraping and text mining skill of candidates, as well as the ability to translate complex data into written findings and policy implications. This assignment should take candidates no more than four elapsed hours to complete. Please compile and submit your results and response (including codes/scripts utilized) to ICTC's Manager, Data Analytics & Research, Rob Davidson at r.davidson@ictc-ctic.ca by **11:59AM PDT on Monday, September 9th, 2019.**