

# Just How “Linked in” on LinkedIn Are You?: LinkedIn Engagement Model

A UVA Data Science Case Study by Franceska Padilla Coe, Fall 2023

**Scenario and Motivation:** If you are receiving this document, it most likely means that you attend college. Most people in college intend on getting a job, whether it is an internship, during the school year, or after graduation. One step many people take these days to obtain a job is creating a LinkedIn account from which they can network, post about skills they obtain, and look and apply for jobs. However, like many other social media platforms, there are ways for certain posts and profiles to receive more engagement than others. More engagement often means more exposure, and your network can grow bigger and faster than before. Additionally, having future employers look at your profile can help leave an impression for considerations down the line. Your task is to use data science tools that allow you to analyze your current LinkedIn presence in order to come up with possible ways to grow or improve it.

**Deliverable:** You will produce two models, one being a spaCy Natural Language Processing (NLP) model and the other being a random forest model that will allow you to analyze your LinkedIn profile text (posts and comments) and its impact. You will be using your own LinkedIn profile’s metrics, which you can download from your LinkedIn account. Your analysis should use the models mentioned above and result in three to five ideas for engagement improvement, which means steps you can take to grow your presence and engagement on LinkedIn. You will also produce a presentation summarizing your project and focusing on why you took the steps you took and what your outcome ended up being.

## Case Study Contents:

- Rubric - What do you need to be successful?
- “LinkedIn Post Exploratory Analysis”
  - A step-by-step guide of one way you can perform this analysis that includes implementations of spaCy and random forest
- “Analyzing LinkedIn Content: A practical application of Data Science”
  - A more general summary of steps you can take to analyze your LinkedIn profile content. Includes a variety of resources you can use.
- “Data Says My \$250k Bachelor’s Not Worth Crap”
  - Provides previous motivation for work done before this case study and gives a good overview of how to analyze LinkedIn job descriptions to compare your profile to
- “The Most Valued Skills in the Job Market”
  - A project done before that gives more insight on work done on LinkedIn job descriptions and code that came along with the project