

Professional Profile — Cao

Professional Matching Report

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1 Introduction

Hello, Cao! Welcome to your professional matching report! In this document, you'll find solidly researched information on your compatibility with 873 different career paths.

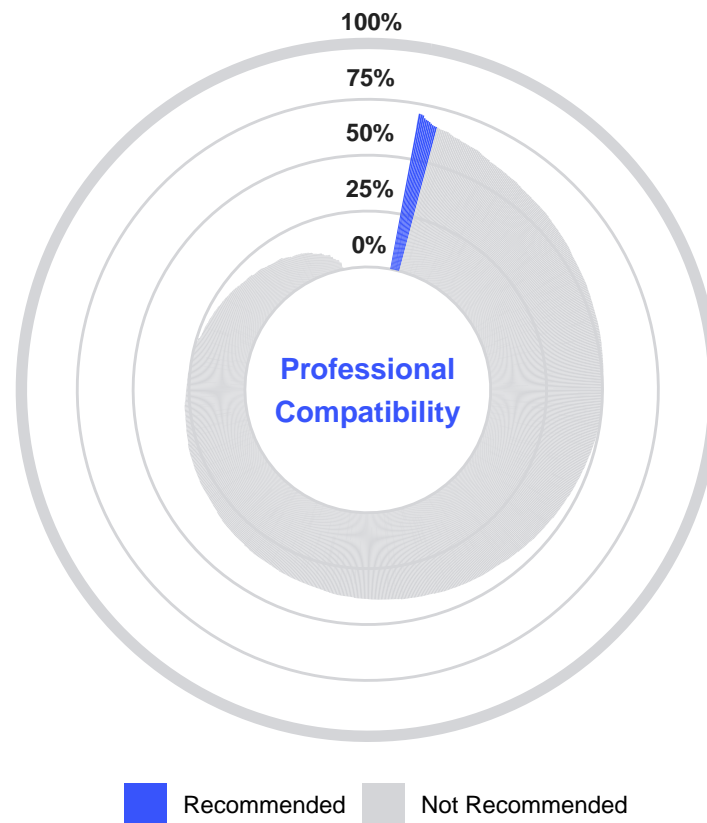
Our state-of-the-art psychometric models and questionnaires were developed using publicly available data from the Bureau of Labor Statistics (BLS) and the Occupational Information Network (ONET). This database consists in a set of 161 job characteristics, such as entry level of education, required skills, abilities and other competencies (rated from 0 to 1), as well as typical job activities, job hazards, and so on.

One of our goals at Atlas Research is to determine the career that best fits your professional profile. Therefore, we assess your most important competencies and job preferences, and compare these with the 873 occupations we've gathered from the BLS and ONET. Then, we arrange your professional matches best to worst and estimate a compatibility score as a percentage, indicating your similarity to each occupation.

2 Professional Compatibility Overview

2.1 Ranking

Figure 1: Professional Compatibility Ranking



The figure above is a circular bar chart of professional compatibility scores, where each bar represents the percentage of similarity between your unique set of competencies and one of 873 occupations. The compatibility metric ranges from 0 to 100%, as shown on the vertical axis in the middle of the graph. Your recommended occupations are highlighted in purple, and those with lower compatibility in grey. As this report aims to provide only a brief overview of your professional profile, we will not go into too much detail about specific career matches. See Table 1 for a sample of your best and worst matches.

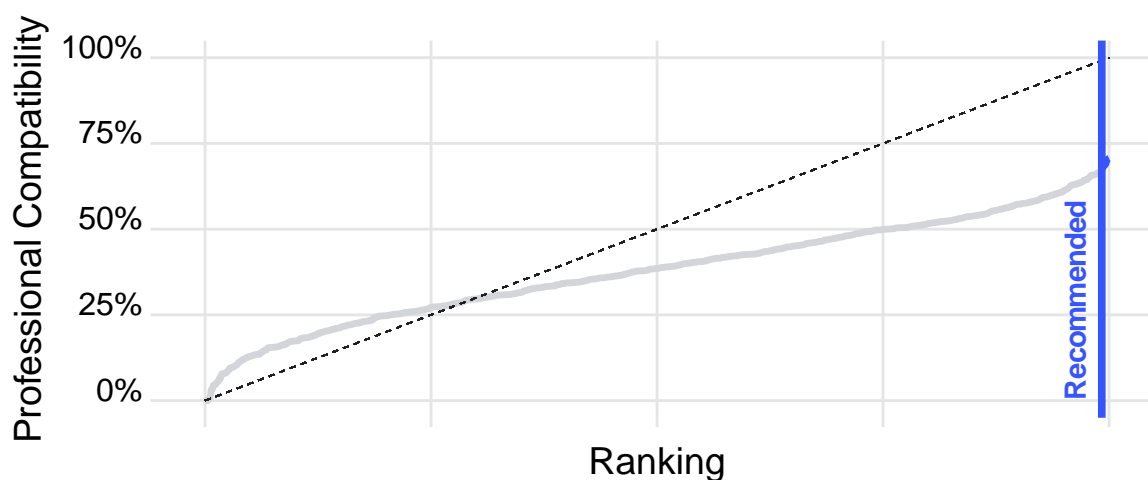
Table 1: Your Top 7 and Bottom 3 Career Matches

Rank	Occupation	Wage	Compatibility
1	Chief Executives	\$179,520.00	70.67%
2	Treasurers and Controllers	\$131,710.00	70.52%
3	Actuaries	\$105,900.00	70.26%
4	Mathematicians	\$108,100.00	69.11%
5	Natural Sciences Managers	\$137,900.00	68.63%
6	Regulatory Affairs Managers	\$124,650.00	68.34%
7	Social Work Teachers, Postsecondary	\$71,010.00	67.93%
871	Helpers—Carpenters	\$36,690.00	0.00%
872	Loading and Moving Machine Operators, Underground Mining	\$57,900.00	0.00%
873	Rock Splitters, Quarry	\$37,700.00	0.00%

Considering this, firstly we note that your best match is ‘Chief Executives’, with 70.67% compatibility; and the worst is ‘Rock Splitters, Quarry’, with 0%. The median match is ‘Geodetic Surveyors’, with 38.54% compatibility, below which lies 50% of careers. Thus, it is evident that the scope of your recommended activities is extremely narrow, covering 8 occupations.

The same information can be conveyed with a line chart, like the one in Figure 2 below. This diagram features, on the horizontal axis, your career matches ranked lowest to highest based on the respective similarity coefficients (on the vertical axis). Therefore, each point that constitutes this line chart is your matching percentage with a given career. And because connecting all the points on the graph yields a progression of professional compatibility, this resulting line is called the ‘professional compatibility curve’. Again, the recommended occupations are highlighted in purple, and the unhighlighted ones (in grey) are not recommend, at least not in terms of overall similarity.

Figure 2: Professional Compatibility Curve



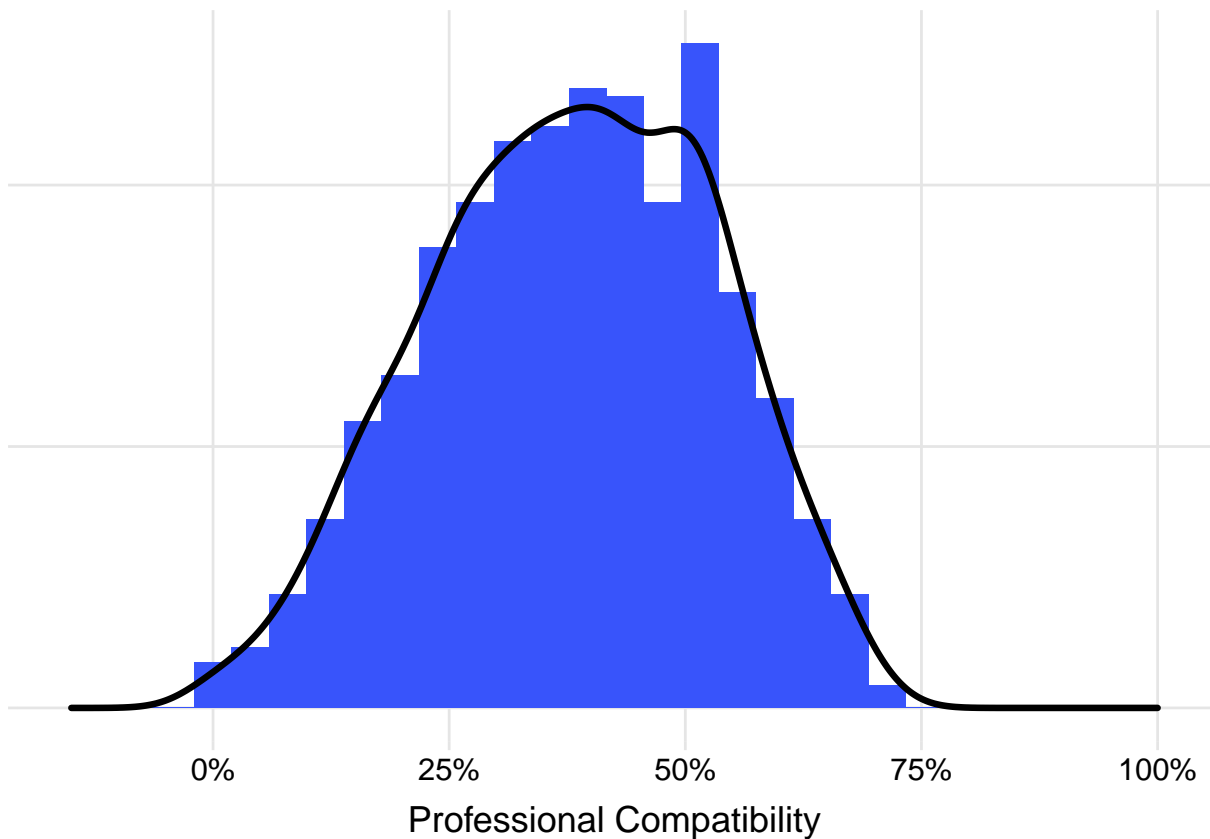
Now, one important thing to comment on is the shape of your professional compatibility curve. The slope of the curve is an indirect measure of how spread apart is your professional profile. For if the curve is flat, then all values are identical. But, in contrast, as the angle of the line increases to 45 degrees (as in the dashed black line), all observations become evenly spaced out and well distributed. And since the distribution in question concerns the viability of different types of employment options, the slope of the professional compatibility curve, in conjunction with the range of recommended occupations, is a strong indicator of how broad or specialized is your professional profile.

2.2 Distribution

It is straightforward to understand the above-mentioned distribution of viable careers by looking at a histogram of professional compatibility scores (Figure 3). A histogram is a data visualization tool which enables us to clearly see the dispersion of a given variable. It works by segmenting data into a desired number of intervals called bins, denoted by the columns on the graph. The height of each column is proportional to the frequency of data points within its bin. Hence, the tallest columns represent the most frequent intervals or classes of data, and as the columns decrease in height, so too the data points in a bin decrease in frequency.

Figure 3 also displays an overlaid density curve of compatibility scores. A density plot is analogous to a histogram, and likewise it is used to analyse a variables’s dispersion and centrality. However, where histogram bins are discrete in nature (they are fixed intervals of numeric data), densities are smooth,

Figure 3: Professional Compatibility Distribution



continuous and not limited by discrete bins. The vertical axis is omitted for simplicity's sake, as densities are dimensionless and not interpretable in themselves.

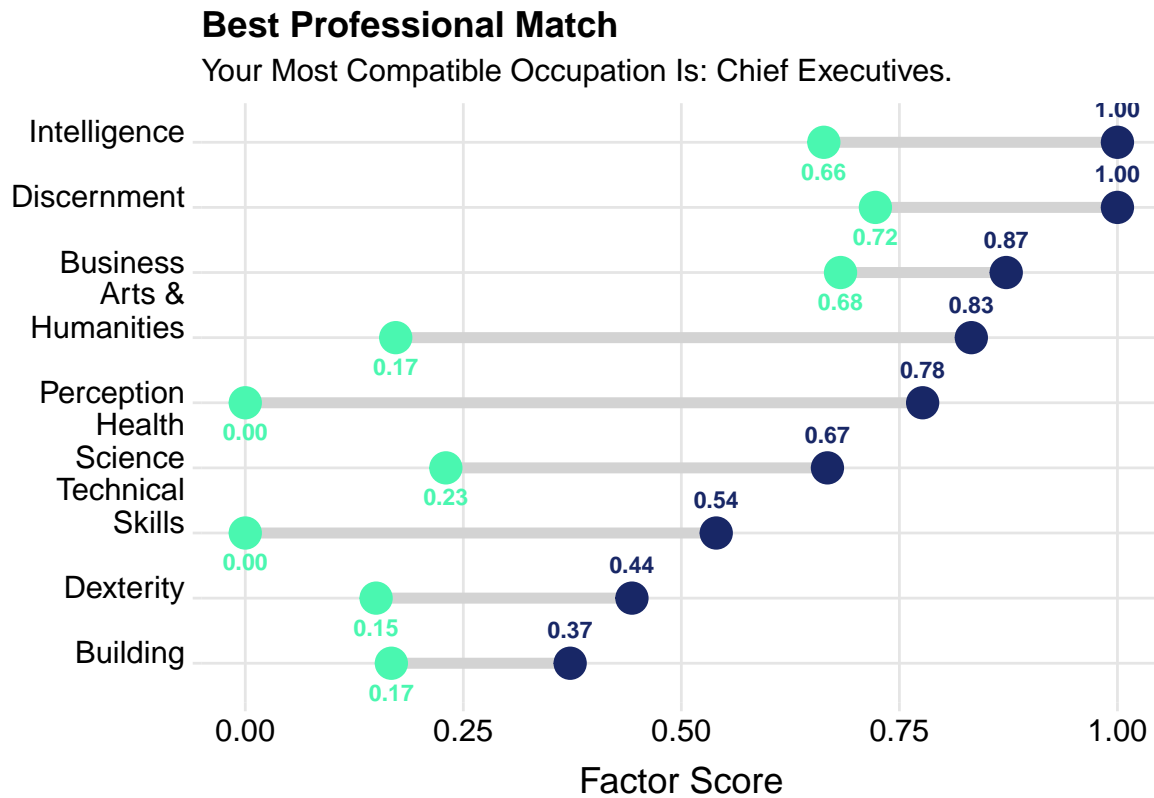
In either case, it is now even more evident how your profession profile is distributed. For instance, the variance of similarity scores makes the histogram and density to be shorter in height, but horizontally larger. Less varied, or specialized, professional profiles, on the other hand, produce slimmer and taller histograms and densities. The centrality of the distribution is very important as well: if compatibility scores concentrate at the lower end of the scale, then most occupations are a poor match and viable career paths will be limited; but if the distribution is centered toward the right end of the scale, then the opposite is true.

Statistically, we can assess how dispersed is the compatibility curve by calculating the variance of your compatibility scores. In addition, the skewness of the curve tells us if your profile is more restricted to a few niche occupations or if it is less defined. By doing these calculations, we find you have somewhat left-skewed and varied matching percentages across all occupations. This means your professional profile is not too specialized, and you can likely thrive in a few different career paths, all else being equal.

3 Brief Compatibility Analysis

3.1 Categories and Factors

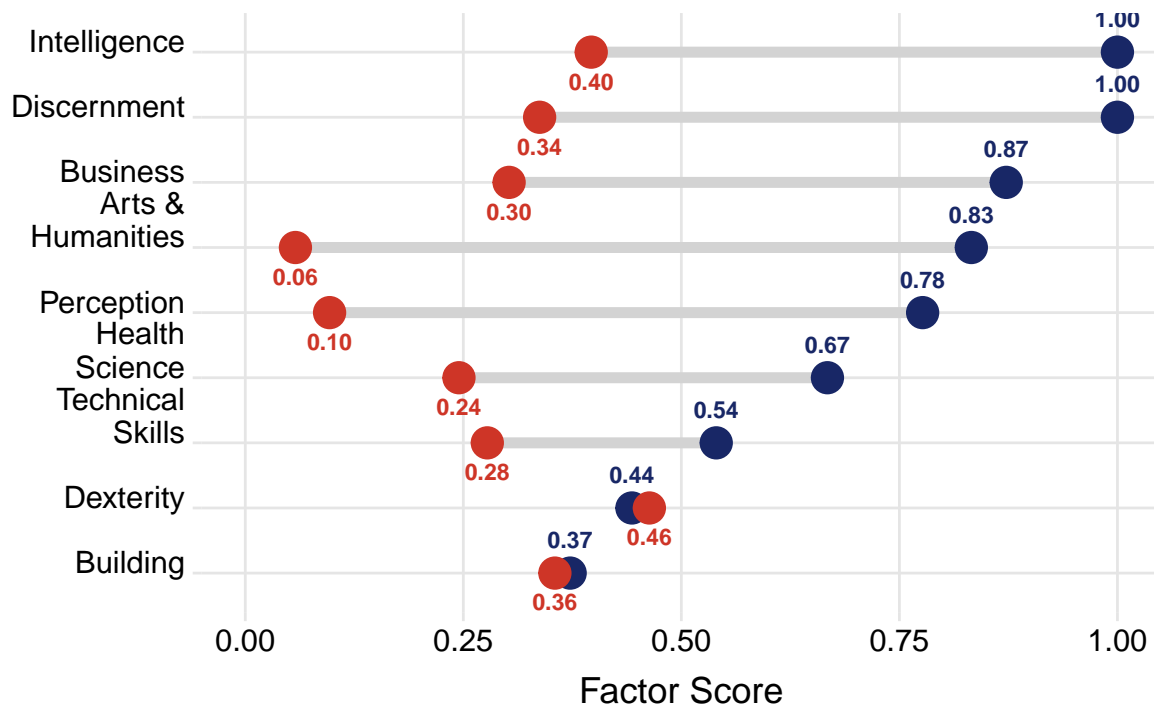
3.2 Your Best and Worst Matches



[1] "dsds"

Worst Professional Match

Your Least Compatible Occupation Is: Rock Splitters, Quarry.



[1] “dsds”

4 Finishing Remarks