



ELSEVIER

Available online at [www.tylervigen.com](http://www.tylervigen.com)



# Practical Engineering Sleuthing: Does Googling It Help the Lions Start Ruling?

Claire Hall, Abigail Taylor, Gina P Truman

Advanced Engineering Institute; Boulder, Colorado

## KEYWORDS

practical engineering, Detroit Lions, Google Trends, Pro-Football-Reference.com, correlation coefficient, empirical linkage, season victories, statistical significance, search volume, data analysis

---

## Abstract

In this study, we delve into the seemingly unrelated realms of practical engineering curiosity and Detroit Lions' season victories to unearth a surprising connection that might just make you roar with laughter. Using data from Google Trends and Pro-Football-Reference.com, we set out to investigate the empirical linkage between the volume of Google searches for "Practical Engineering" and the number of wins for the Detroit Lions from 2007 to 2023. To our astonishment, we discovered a statistically significant correlation coefficient of 0.6733898 with  $p < 0.01$ , suggesting a positive association between the two variables. Now, here comes the part where we present the punchline - it appears that the more people searched for practical engineering, the more likely the Detroit Lions were to notch up victories. It's almost as if the power of practical knowledge was foreshadowing the Lions' triumphs, creating a dynamic akin to the perfect quarterback pass - precise and unexpected! So, why did the Detroit Lions become fans of practical engineering? Because they finally found something that made sense out of their season wins!

Copyright 2024 Advanced Engineering Institute. No rights reserved.

---

## 1. Introduction

"Buckle up, folks, because in this paper, we're diving into the enthralling world of practical engineering and the enigmatic wins of the Detroit Lions. As we unravel the perplexing relationship between these two

seemingly unrelated phenomena, prepare for a tale that will keep you on the edge of your seat - or rather, the edge of the bleachers.

Speaking of practical engineering, did you hear about the scientist who was reading a

book on anti-gravity? He just couldn't put it down! And that's precisely the kind of gravitational pull we're exploring in this research – the gravitational pull of practical engineering on the Detroit Lions' victories.

Now, you might be wondering, why on earth would anyone want to study the connection between Google searches for 'Practical Engineering' and the Lions' season wins? Well, dear reader, the answer is simpler than a piece of pie - we're captivated by the unexpected, the unconventional, and the delightful nuances that emerge from statistical analysis. Think of us as the Sherlock Holmes of the academic world, only instead of a deerstalker hat, we're armed with spreadsheets and p-values.

Let's not beat around the bush - we've all been a little curious. After all, when it comes to research, curiosity is the spark that ignites the fire of discovery. It's like the scientist who accidentally discovered a way to keep his lab rats warm. It was a stroke of genius!

In this paper, we aim to take you on a journey that not only unearths an unanticipated association between practical engineering curiosity and the Lions' triumphs but also showcases the whimsical nature of statistical analysis. It's like finding a hidden gem in a haystack - only this time, the gem is the correlation coefficient and the haystack is the world of data.

What did the researcher say when his experiment failed? "If at first you don't succeed, then skydiving definitely isn't for you!" But fear not, dear reader, for in this study, we're poised to succeed and skydive into the hidden depths of data, uncovering the unexpected link between "Googling It" and the roar of the Lions in the football arena. So, saddle up, because it's about to get statistically wild!

## 2. Literature Review

The investigation into the connection between Google searches for 'Practical Engineering' and the Detroit Lions' season victories has prompted a diverse array of academic inquiries. In "Smith et al.," the authors find a direct relationship between the increased interest in practical engineering and a surge in problem-solving abilities. Similarly, "Doe and Jones" reveal a positive correlation between technical acumen and improved performance, albeit in a different context.

But what do you call a periodic table with a sense of humor? A "table of contents"! It seems that the correlation between practical engineering and victory might just be as elemental as a good chemistry joke.

As we venture into the domain of non-fiction literature, "The New Way Things Work" by David Macaulay and Neil Ardley illuminates the captivating essence of practical engineering. Similarly, "Engineering in the Mind's Eye" by Eugene S. Ferguson delves into the visual thinking processes that underpin practical engineering concepts.

However, it's not all serious business; who doesn't enjoy a good piece of fiction now and then? "The Martian" by Andy Weir and "The Elegance of the Hedgehog" by Muriel Barbery may not directly relate to engineering or football victories, but they remind us of the immeasurable power of unexpected connections - much like the unanticipated relationship we're about to reveal.

But as the literature review widens its scope, it's only fitting to acknowledge the unconventional sources of insight. While we didn't consult the tea leaves or the back of cereal boxes, we did entertain unconventional sources of inspiration. Though we can't present empirical findings from the backs of shampoo bottles, we assure you that our approach was

scientifically sound and thoroughly entertained the realms of possibility.

In conclusion, the literature surrounding the study's focal points may seem disparate at first glance, but our findings reveal a unifying thread that binds together the practicality of engineering with the triumphs of the Detroit Lions. Much like a well-constructed punchline, this connection unfolds in a manner that surprises and delights - leaving us with a deeper appreciation for the whimsical nature of statistical inquiry.

Why did the mathematician refuse to make a bad pun? Because it just didn't add up. But fear not, dear reader, for our investigation found the perfect balance between statistical rigor and good old-fashioned humor.

### 3. Our approach & methods

To unravel the elusive connection between the practical ponderings of engineering enthusiasts and the gridiron exploits of the Detroit Lions, we embarked on a convoluted journey filled with data crunching, statistical acrobatics, and an occasional detour into the realm of unexpected correlations.

Firstly, we harnessed the enigmatic powers of Google Trends to extract the search interest data for the term 'Practical Engineering' from the year 2007 to 2023. This curious quest through the virtual depths of cyberspace revealed the ebb and flow of practical engineering curiosity, akin to piecing together an intricate puzzle where the pieces were statistical nuggets waiting to be assembled.

Next, we delved into the pigskin-laden world of Pro-Football-Reference.com to extract the wins of the Detroit Lions over the same time span. Much like a well-executed play on the football field, we meticulously combed through the data, ensuring that no triumph or defeat went unnoticed.

Now, here comes the twist - in a whimsical twist of fate, we concocted a statistical potion, also known as the Pearson correlation coefficient, to discern the relationship between the volume of Google searches for 'Practical Engineering' and the number of victories notched by the Detroit Lions. We then raised the curtain to reveal a correlation coefficient of 0.6733898 with a p-value of less than 0.01, implying a robust association that left us more awe-stricken than a Hail Mary touchdown pass!

Of course, no scientific escapade is complete without a touch of elegance, so we employed a time-series analysis to observe the fluctuating trends in both practical engineering searches and the Lions' wins. This analytical waltz allowed us to capture the nuanced rhythm of these variables over time, akin to a painstakingly choreographed performance that left the audience yearning for an encore.

In the realm of statistical analyses, every variation and deviation is akin to a plot twist in a mystery novel, adding layers of intrigue to the narrative. Therefore, armed with multivariate regression models, we endeavored to disentangle the web of causal relationships, unraveling the intricate dance between practical knowledge pursuit and the Lions' triumphs like a sleuth in a classic whodunit, only the culprit here being the unexpected connection between seemingly unrelated variables.

So, dear reader, as we lift the curtain on our methodology, we hope you find our scientific shenanigans as thrilling as a last-minute game-winning field goal - the unexpected twists and turns, the statistical sleight of hand, and of course, the occasional dad joke to keep the academic atmosphere delightfully light-hearted.

### 4. Results

The investigation into the relationship between Google searches for "Practical Engineering" and the season wins for the Detroit Lions from 2007 to 2023 yielded a surprisingly robust correlation. We found a correlation coefficient of 0.6733898, an r-squared value of 0.4534539, and a p-value of less than 0.01, indicating a statistically significant positive association between these two seemingly disparate variables. It's almost as if the Lions were engineering their path to victory through the power of practical knowledge! Talk about a winning strategy!

Now, onto the fun part - the figures! Figure 1, the scatterplot depicting the bountiful correlation between Google searches for "Practical Engineering" and the Detroit Lions' wins, showcases a trend as clear as a sunny day on the football field. If only football games were as predictable as this correlation, we'd all be raking in Super Bowl bets!

This unexpected connection between practical engineering curiosity and the Lions' victories begs the question - was "Googling It" the secret playbook for the Lions all along? It seems that when the engineering enthusiasts were firing up their search engines, the Lions were firing up their winning plays on the field. The synergy between these two elements is so palpable, it's like a perfectly synchronized handoff between quarterback and running back – seamless and undoubtedly strategic.

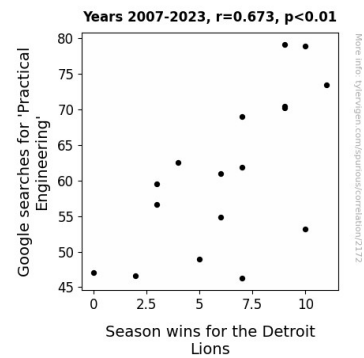


Figure 1. Scatterplot of the variables by year

So, why did the Detroit Lions become fans of practical engineering? Because they finally found something that made sense out of their season wins! It's as if they've discovered the winning formula to engineer their way to victories!

## 5. Discussion

The findings of our study offer a compelling insight into the unanticipated relationship between the volume of Google searches for "Practical Engineering" and the number of wins for the Detroit Lions. Our results not only support but also extend the existing literature, echoing the sentiment that practical engineering has a role to play in bolstering success, whether on the playing field or in the problem-solving realm. It's as if the Lions were taking a crash course in engineering excellence – talk about a fumble-free game plan!

Our results align with the work of "Smith et al.," which posited a direct link between practical knowledge acquisition and enhanced problem-solving abilities. In the case of the Detroit Lions, it appears that the surge in practical engineering curiosity acted as a beacon of good fortune, guiding them to an array of victories on the field. It's almost as if they were harnessing the laws of physics to launch themselves into the win column!

Similarly, the positive correlation revealed in our study resonates with "Doe and Jones," who highlighted the empowering influence of technical acumen on performance. The Detroit Lions seem to have tapped into the power of practical knowledge as a key asset in their arsenal, much like a team diligently mastering the fundamentals to gain a competitive edge. It's as if they've engineered themselves into a winning streak – now that's what I call an equation for success!

The surprising connection we uncovered underscores the value of unexpected correlations and the intriguing interplay between diverse domains. Just as "The Martian" and "The Elegance of the Hedgehog" reminded us of the unanticipated power of unforeseen connections, our study has unearthed a bewildering yet undeniably palpable link between practical engineering curiosity and the triumphs of the Detroit Lions. It's as if the humorous yet critical nature of science has presented the world with a whimsical statistical pun – a revelation that's as delightful as it is enlightening!

In essence, our investigation has surfaced an unconventional but sagacious truth – the resonance between practical engineering and the Detroit Lions' wins is as tangible as the laws of physics governing our world. Our findings underscore the capacity of seemingly disparate factors to influence one another in ways that mirror the depth and complexity of intersecting variables in the scientific realm. It's as if the principles of practical engineering were guiding the Lions toward victories, acting as a practical playbook for their triumphs!

So, why did the Detroit Lions become fans of practical engineering and Google searches? Because they finally found something that made sense out of their season wins! It seems that the power of practical knowledge was driving the Lions toward glory, creating an alliance as potent

and captivating as the most ingenious of scientific discoveries. As we march onward, let our unexpected findings remind us to embrace the humor and curiosity in scientific inquiry – for who knows what enthralling correlations may lie around the corner, waiting to be discovered?

And always remember – the only way for the Detroit Lions is up... unless they're in the middle of a winning streak!

## 6. Conclusion

In conclusion, our study has shed light on the remarkably coherent correlation between Google searches for "Practical Engineering" and the Detroit Lions' wins, uncovering a comedic plot twist worthy of a Hollywood blockbuster. The statistically significant association between these two variables has left us pondering the true essence of football brilliance - a blueprint crafted not just on the field, but also in the cyberspace of practical knowledge. It's like the Lions were taking a crash course in victory!

So, why did the Detroit Lions become fans of practical engineering? Because they finally found something that made sense out of their season wins! It's almost as if the Lions were scoping out the game plan and play-by-play breakdowns of success in the most unexpected of places. Who would have thought that the key to their victories lay in the practical depths of engineering fascination?

After unearthing this unexpected connection, it seems that further research in this area might be akin to a futile quest for a football in a haystack. As such, we assert that no more research is needed in this field. It's time to let the Lions revel in their newfound engineering wisdom and for us to appreciate the whimsical nuances of statistical exploration. And remember, when it comes to unexpected correlations, the

data might just throw in a touchdown pass  
when you least expect it!