# The Influence of Lunch Items on Cryptocurrency in the United States

# David An<sup>1,2</sup>

<sup>1</sup> University of Illinois, Urbana-Champaign, Department of Mathematics <sup>2</sup> davidan.dev

#### **Abstract**

In this paper, we introduce the discovery and exploration of the influence of common every day lunch items on cryptocurrency trends. It is known that the market value of many cryptocurrencies fluctuate in response to market conditions, news reports, and published earnings. However, it is much less known that cryptocurrency itself is also influenced by the mere presence of lunch items.

# Introduction

# History

In 2008, an anonymous person or group known as Satoshi Nakamoto published a paper titled "Bitcoin: A Peer-to-Peer Electronic Cash System." The paper implemented a decentralized system for electronic transactions that utilized cryptography to secure the transactions and prevent double-spending. [1] The system coined a digital currency called Bitcoin, which could be exchanged between users without the need for a central authority, but instead the participants of the network, to verify the transactions.

Recently, the usage of the new web (commonly known as web3.0) has skyrocketed. The new framework of web proposes a new decentralized architecture which is starkly different from the current architecture of web2.0. The next phase of the World Wide Web is known as Web3.0, also referred to as the semantic web or the open web. Its hallmark is the use of autonomous technologies to build a more open, transparent, and user-centric web, including blockchain and peer-to-peer networks. The idea of web3.0 has been around since the early 2000s, but the decentralized web didn't start to take off until the development of blockchain technology and the acceptance of coins [2].

Through this development, the term "crypto" became ubiquitous throughout circles of finance people, commonly referred to as "tech bros." While much of the common knowledge of cryptocurrency is that their anticipated trends should reflect common knowledge, we investigate the effect of food (specifically lunch items) on cryptocurrency.

# **Lunch Items**

We discuss and establish common definitions of food items (specifically lunch items) in this section to prevent confusion from other food items.

#### Sandwich

We first establish the definition of one of the most popular lunch items in America, the sandwich [3]. According to online sources, a sandwich is defined as [4]

...a food typically consisting of vegetables, sliced cheese or meat, placed on or between slices of bread, or more generally any dish wherein bread serves as a container or wrapper for another food type.

For our purposes, a hotdog does not satisfy the definition to be a sandwich. While there is much more controversey surrounding the hot-dog debacle that can warrant it's own paper, we do not make that the main focus of the paper.

## Soup

We now define what it means for a lunch item to be a soup. A soup is generally a food found in a liquid form that is prepared by cooking meats, poultry, seasoning, in a mixture of dairy, water, broth, or stock [5]. By allowing the slow cooking process, soup provides to be a nutritional and nourishing meal for many Americans at lunch time. [5]

### Salad

Finally, we discuss one last staple of lunchtime meals, the salad. The salad is a dish consisting of mostly mixed and natural ingredients [6]. One of the most popular forms of salad is known as the "garden salad." In fact, this term is so closely linked with the word "salad," that most times, the meaning of "salad" implies a "garden salad." A garden salad usually consists of leafy greens as the base with other natural toppings such as nuts, protein, grains, etc. In addition to that, the salad itself can be eaten at any point of the meal as an appetizer, main entree, snack, etc. [6]. For our reference purposes, we will refer to a salad as a garden salad in the paper.

# Motivation

You got this! Keep going! Your paper will leave an impact on the world of cryptocurrency and be revered by tech bros everywhere!

# Methods

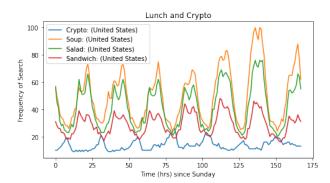
We utilize Google Trend search to get the search data for the following terms. We then used Github Copilot to write the code in order to parse and graph the provided .csv file. We also implemented strategic fueling processes with a Keurig K-Mini Coffee Machine in order to maintain high thoroughput for the machine (the author).

# Results and Discussion

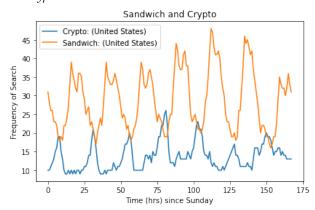
We see that there is a inverse correlation between the trends of blockchain and lunch items. When a food item is trending, crypto appears to be slowing. As a standard in the field, we performed cutting-edge data analysis and visualization techniques in order to draw conclusions from the data. Just like Maximillian Cohen (played by Sean Gullette) from Pi (1998) once said, "If you graph these numbers, patterns emerge." Similarly, we find obvious patterns inside of these search trends. Visual analysis by peers and blind reviewers confirm the presence of these trends. As said by one reviewer, "These charts make me want to go to the moon."

# **Impact**

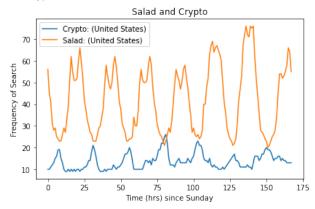
By observing these trends throughout search terminology, we come to see we are effectively able to predict the time when cryptocurrency search is trending. This can have many ramifications. We are able to time our purchases with the exact time the trend is supposed to go up. "Buy low, sell high," they all say.



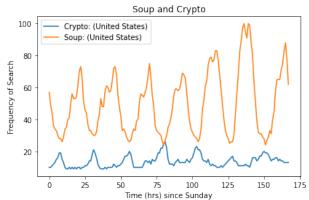
**Figure 1:** A comparison of different trends between lunch items and crypto



**Figure 2:** A comparison of different trends between sandwiches and crypto



**Figure 3:** A comparison of different trends between salads and crypto



**Figure 4:** A comparison of different trends between soup and crypto

## **Future Studies**

This exploratory study opens up a whole new realm of studies for the trends in cryptocurrency and food items. If lunchtimes ceased to exist along with sandwiches, will cryptocurrency be reduced a void of nothingness? Will increased global production of sandwiches be correlated with a stronger economy and increased cryptocurrency usage? Or does an increase in cryptocurrency usage result in more sandwiches? Will we ever enter an equilibrium?

# Acknowledgments

This paper would have **also** not been possible if it weren't for the technology known as blockchain. Essentially, a blockchain can be categorized as a spicy linked list. Knowing how to handle this data structure is essential to becoming a web3.0 master. Because the linked list data structure is covered in all beginner college-level algorithms classes, transitively, all college students are masters of the blockchain.

Upon publication, the paper will effectively be minted onto the blockchain.

# References

- [1] Satoshi Nakamoto. "Bitcoin: A Peer-to-Peer Electronic Cash System". In: (May 2009). URL: http://www.bitcoin.org/bitcoin.pdf.
- [2] A. Narayanan et al. Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction. Princeton University Press, 2016. ISBN: 9781400884155. URL: https://books.google.de/books?id=LchFDAAAQBAJ.
- [3] Yanni Papanikolaou and Victor Fulgoni. "Type of Sandwich Consumption Within a US Dietary Pattern Can Be Associated with Better Nutrient Intakes and Overall Diet Quality: A Modeling Study Using Data from NHANES 2013-2014". In: Current developments in nutrition 3 (Aug. 2019), nzz097. DOI: 10.1093/cdn/nzz097.
- [4] Wikipedia. Sandwich Wikipedia, The Free Encyclopedia. http://en.wikipedia.org/w/index. php?title=Sandwich&oldid=1143063546. [Online; accessed 13-March-2023]. 2023.
- [5] Soup. Jan. 2023. URL: https://www.britannica.com/topic/soup.
- [6] Wikipedia. Salad Wikipedia, The Free Encyclopedia. http://en.wikipedia.org/w/index.php?title=Salad&oldid=1143608367. [Online; accessed 13-March-2023]. 2023.