

Appendix - Resources

I researched a significant amount of youtube videos in order to help with my own understanding of Fourier series and Fourier transforms using epicycles. I found all of these videos to be extremely useful in conceptualizing both Fourier series and transforms:

▶ Fourier Series

▶ But what is a Fourier series? From heat flow to drawing with circles | DE4

▶ But what is the Fourier Transform? A visual introduction.

▶ Coding Challenge #125: Fourier Series

▶ Coding Challenge #130.1: Drawing with Fourier Transform and Epicycles

I also read a large amount of articles to better understand the specifics behind Fourier series and transforms. These articles, especially the one by Jezzamon, really helped out with giving me a solid understanding and base on how I wanted to approach this application.

<https://mathworld.wolfram.com/FourierSeries.html>

<https://www.jezzamon.com/fourier/index.html>

<https://betterexplained.com/articles/an-interactive-guide-to-the-fourier-transform/>

<https://alex.miller.im/posts/fourier-series-spinning-circles-visualization/>

This github repository was a life saver when it came to converting SVG files into JSON files. It allowed me to use JSONArray to calculate the Fourier transform which saved me an immense amount of time.

<https://spotify.github.io/coordinator/>

This github repository by Daniel Shiffman was extremely useful as it contained the main methods for calculating Fourier transforms and drawing using epicycles.

[https://github.com/CodingTrain/website/tree/main/CodingChallenges/CC_130_Fourier Transform_1/Processing](https://github.com/CodingTrain/website/tree/main/CodingChallenges/CC_130_Fourier_Transform_1/Processing)