# Tianyi Wang

## Background Research

1. I proposed that since time series have three characteristics: stationarity, trend and seasonality, we should start with this. I gave the method of detecting seasonality such as ts() and decompose() function, studied the approaches of detecting stationarity, and ways to eliminate or reduce trend and seasonality such as Difference Transform, Logarithmic Transform and Augmented Dickey-Fuller (ADF) Test. I also read ARIMA models chapter in one book. Some of the above content contributed to the documentation.
2. Researched MACD, RSI, CCI, KDJ indicators, summarized their respective usage, characteristics and situations that I think may be applicable, and attached all reference links to help team members understand. This file is placed in my personal folder in the GitHub repository, so that all team members can check it at any time, written in Chinese.

## Coding

1. In the first offline group meeting, I took bbands\_holding\_period as an example to understand how the code works with the group members. For example, how the main file is linked to the example\_strategies file and the strategy files and runs. I am one of the members who have solved the most problems.
2. Created a code template to help group members who are not familiar with the code quickly start to implement their own strategies.
3. I completed all the codes and a series of tests in my strategy (CCI Trend Following) alone, and helped some other team members solve problems together.

## Strategy Ideas

1. I thought about two strategies on my own: CCI Trend Following and KDJ Trend Following. After consideration, I chose the first one to implement.
2. I was the first person to complete the framework of my own strategy. After completion, I helped another group member to determine his strategy in one group meeting.

## Presentation and Report

1. Presentation: Explain and answer questions about individual strategies, as well as the overall ideas of our group.
2. Report: All content related to personal strategy is contained in sections 2, 3, 4, and 5.