## CASE STUDY OUTLINE

## **Case Study Details:**

This case study is meant to serve as a role play exercise as if you were presenting to a real Client. You will be given Business Requirements with an expected outcome to present. Please focus your solution on the technology area specific to the position you are applying for.

## Scenario:

Attached is a time-series data set giving "ping" readings during a Wi-Fi connection test. "Ping" is a term used in telecommunications to describe signal latency, also called "lag."

You are to develop a PoC in which you develop a methodology for decomposing the signal into its components (trend, periodicity, and noise) and detecting anomalies in the signal from these components.

## **Expectations:**

Please demonstrate the PoC in a slide deck outlining:

- Initial data analysis
- Cleaning and/or transformations applied to the data
- Interesting findings
- Description of the methodology applied
- Metrics used to evaluate the efficacy of the methods employed

Please also submit any source code for review.