- How each group member contributed to the final submission

For this assignment, we began by exploring the data together during our first meeting. Robbie and Yijing focused on communication data using R and Python, while Linh and Yuzhang concentrated on movement data, also using R and Python. Each of us dedicated time to generating what we considered the best plot for our analysis, which we then brought to the next meeting for discussion.

We started with a high-level view of the movement/communication and then started looking into possible outliers.

Among the different approaches, Robbie combined the communication and movement data for a comprehensive analysis. Yuzhang enhanced an interactive heatmap by inserting a slider, Linh focused on movement tracking, and Yijing used a bar plot to examine communication patterns, identifying abnormalities.

In the end, we each took responsibility for writing up and creating the README for our respective plots. We completed the final draft with equal contribution from all team members.

- One obstacle you encountered and how you overcame it

Since this homework assignment contains a large amount of data, we were initially unsure where to start. To maintain efficiency, we decided to visualize the data independently and set a deadline for the coding portion. This approach helped us manage our time effectively and ensured that we remained on track with our tasks.

- If you were to do this assignment again, what would you do differently?

If we were able to do this assignment a second time, we would spend more time identifying patterns before jumping to micro-analyzing any suspicious observations. We were overwhelmed with the large scale of the data and were more focused on plotting out visualizations from the start. We could also map the movement and communication data to reveal visitors that were in groups and what patterns such groups exhibited.