## **OD Matrices**

- Using gps data from taxis, buses, and private vehicles in Shenzhen, we generated an origin-destination matrix for each five minute interval of the day.
- We also created an animation which shows the vehicles moving over time on a map.

## <u>Time/Distance Distributions</u>

- We created two graphs where the x axes were time and distance and the y axes were frequency. Using the previously mentioned trip data, we generated the points and populated said graphs.
- We also created a regression polynomials to help predict future trends and provide mathematical models for the data.
- We've also added the functionality to select only certain regions in Shenzhen.

## Presentations

- I (Ishan) created a presentation on data visualization on a map with Processing.
- I first introduced Processing itself, specifically the Java version of it.
- I explained basic Processing paradigms and then went into visualizing data with the Unfolding library.
- I (Biggie) created a presentation on creating traffic simulations in a Python library called SUMO.
- I went over the setup of SUMO along with some basic examples.
- I finished with a live demo of SUMO using taxi data.