

## Contributions

Group: Railroad Travel Data in China

Group Members: Tongze Wang(Project Owner), Zhaoheng Chen, Howard Ho Wai Ng

Individual Contributions:

Tongze Wang:

- Scripted all train data from the official website of China Railway, including train number, departure time, arrival time, time needed, price.
- Cleaned and wrangled the collected data
- Store the cleaned data into one single json file, so that it can be used by the webpage.
- Build the beta version of the train transfer searching algorithm.

Zhaoheng Chen:

- Plot all the stations into the map with the coordinate dataset
- Implement the algorithm to find all trains that fit within the user's budget and travel time from departure station to arrival station
- Fix the bugs like zooming, color changes, "empty" station and negative price, maximum travel time and budget ,etc.
- Visualization
  - Generate a table to show the user which trains they can take from departure station to arrival station.
  - Create the floating windows, so that user can enter their budget and travel time.
  - Connect the departure station and arrival station with an animation path to show the possible stop stations
  - Design the UI of the maps.

Howard Ng:

- Scripted and geocoded all the coordinate for every train station.
- Built the web page with react and published it to github page with 'gh-pages' package
- Implemented the algorithm to find all stations that fit within the user's budget and travel time
- Visualization
  - Updating the map with all the reachable stations
  - Generate a link to the webpage where the user can buy the ticket from the table.
  - Map reset