

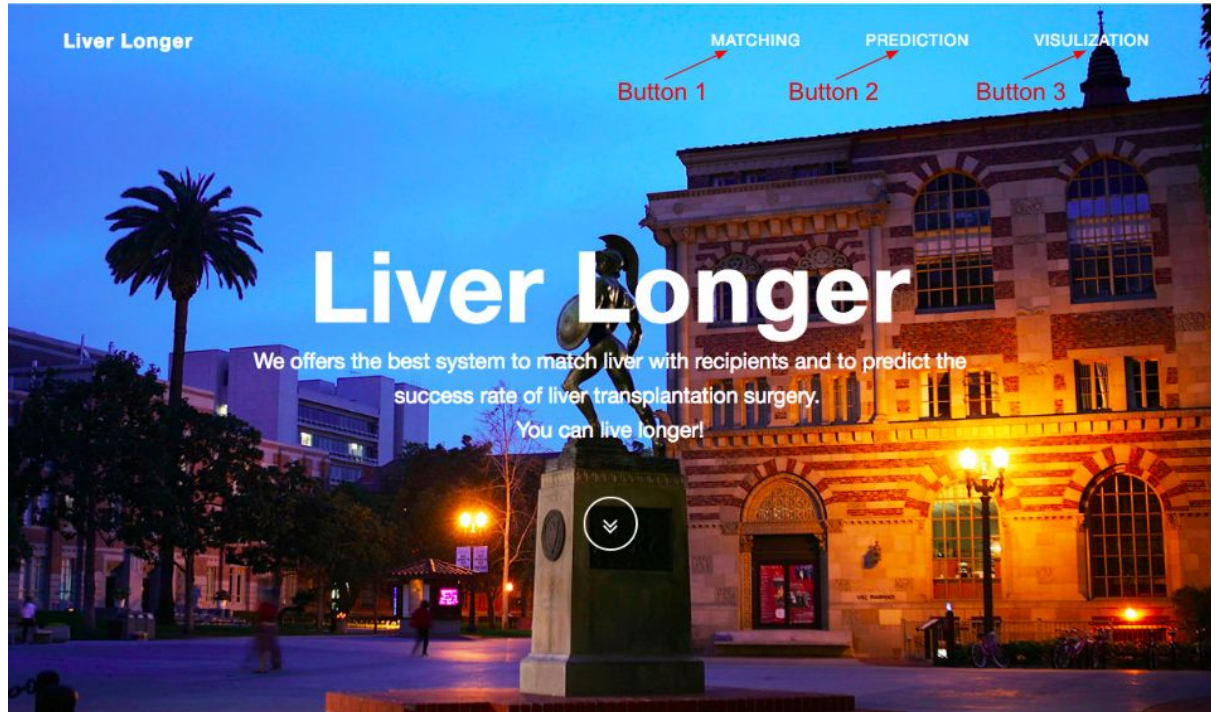
Instruction Manual

- Liver Longer

Introduction	2
Part 1: Matching	3
Part 2: Prediction	5
Part 3: Region	6
Bottom Part: Information	7

Introduction

This webpage is designed by Team Liver Longer, including three main parts and information part.



Click: Button 1 -> The first part of the system

For the first part, we provide the Matching result. Approximately 14,000 patients are listed and waiting for orthotopic liver transplantation(OLT) but only 7,000 OLTs are performed annually. This model can find the best match between a given liver and a list of recipients to save more people and more resource. You could click on different days on different Liver type to see the survival distribution.

Click: Button 2 -> The second part of the system

For the second part, we provide Prediction of our Model. The ability to predict graft failure or primary nonfunction at liver transplant decision time assists utilization of scarce resource of donor livers, while ensuring that patients who are urgently requiring a liver transplant are prioritized. You could upload a CSV file on our site, and we will tell you about the successful rate of all input lines. You could also search through it by states.

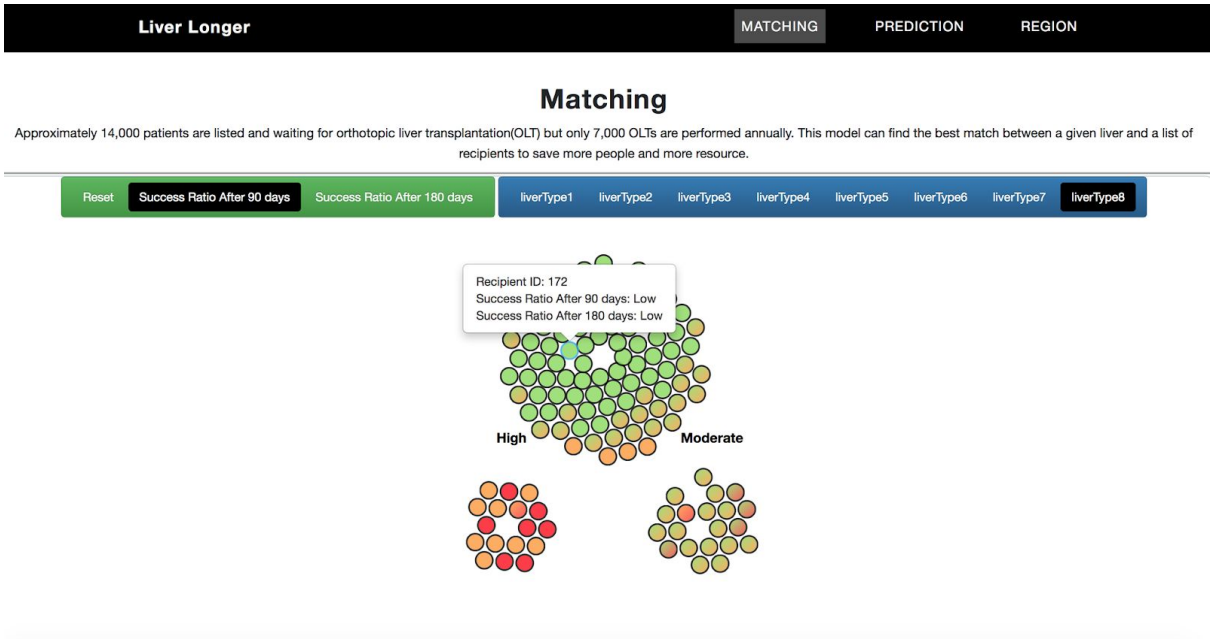
Click: Button 3 -> The third part of the system

For the third part, we provide the Visualization result of different region across America. There are many other factors playing crucial role in the liver transplantation procedure. This part provides a straightforward view of the data and many facts. Select on top about different topic and click on map to see the whole region.

Roll down to bottom -> Information Part

For the information part, member information and contact information is provided.

Part 1: Matching



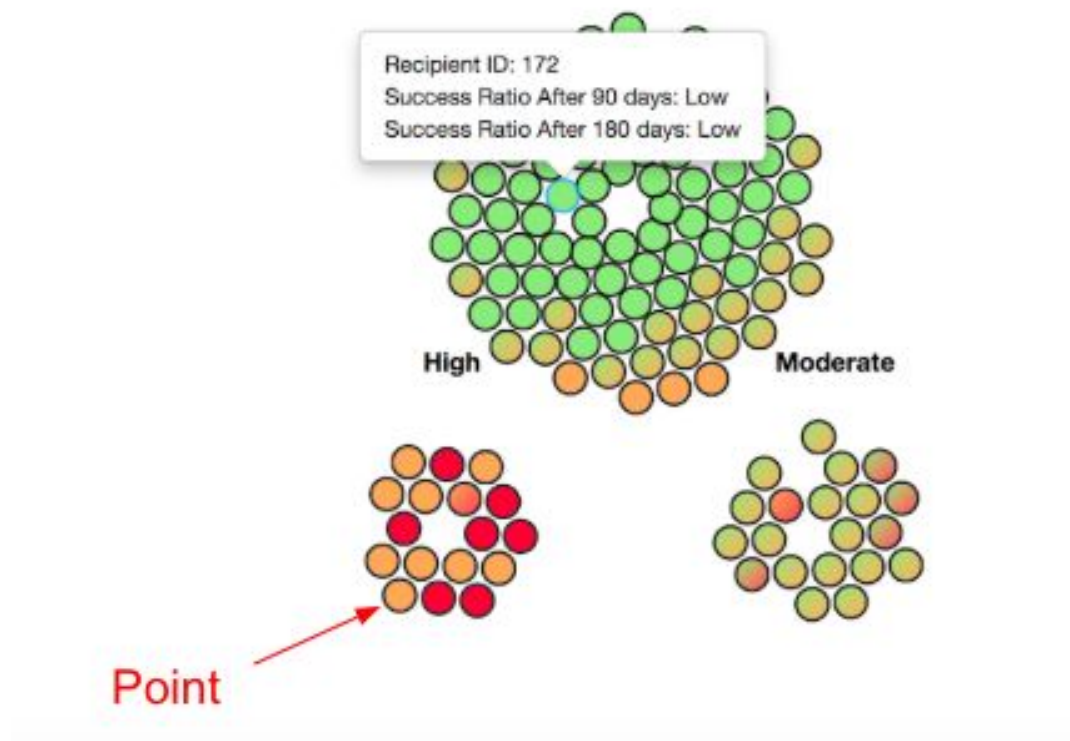
Left Bar



Right Bar



Each Point



Part 2: Prediction

Liver LongerMATCHINGPREDICTIONREGION

Prediction

The ability to predict graft failure or primary nonfunction at liver transplant decision time assists utilization of scarce resource of donor livers, while ensuring that patients who are urgently requiring a liver transplant are prioritized.

Upload your CSV file
Choose File no file selected

Model Select
90 Days

Sample Review Analyze

Search by State...

ID	Region	MELD Scores	Survival Rate
----	--------	-------------	---------------

Click: Button 1 -> Upload CSV file

Note: CSV file should contain recipient information and donor information

Choose: Drop-down Menu -> Choose Model for 90th/180th/360th day

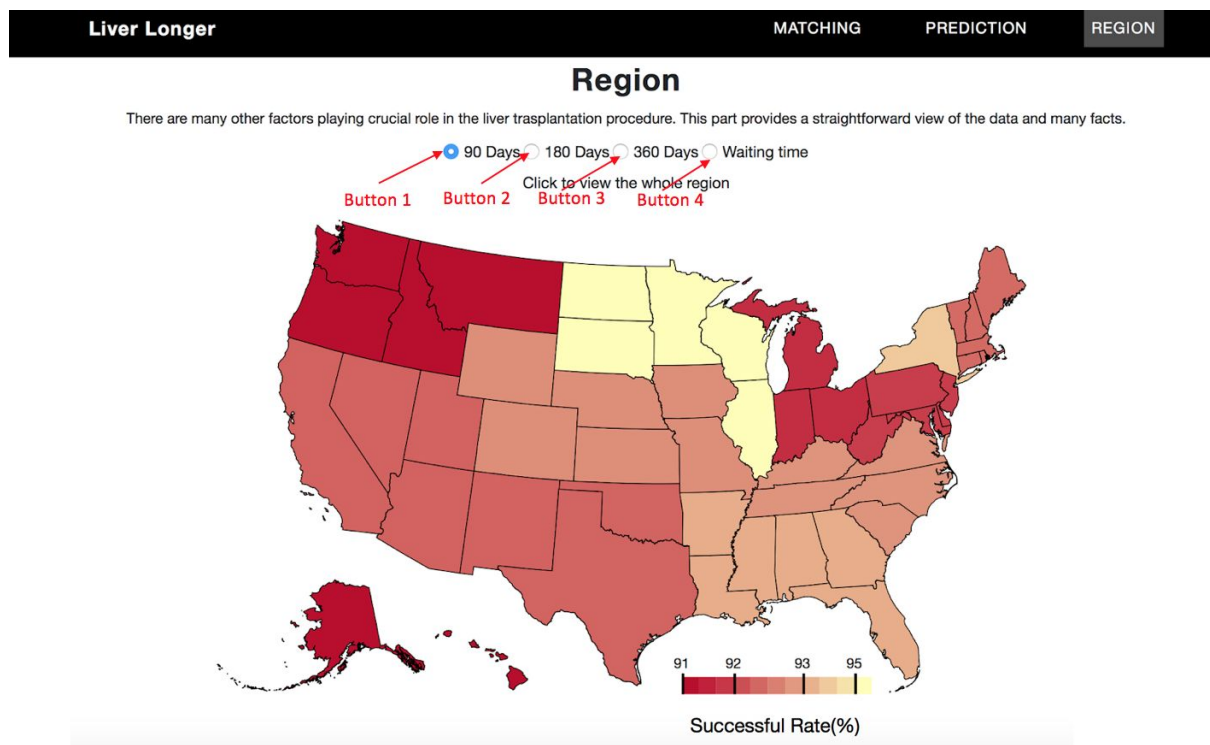
Click: Button 2 -> Run the Model

Model would be run on the back-end, based on the CSV file

Show: Records -> every record in the file will be showed here

Every record includes: ID, Region, MELD Scores, Survival Rate

Part 3: Region



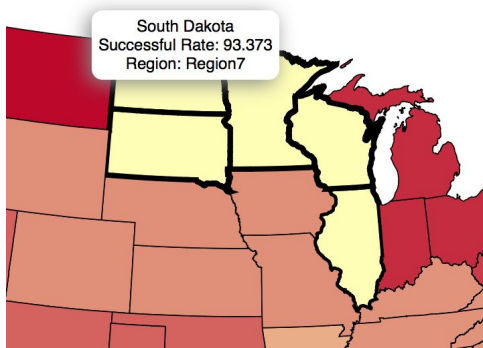
Click: Button 1 -> Survival rate on 90 day for different regions

Click: Button 2 -> Survival rate on 180 day for different regions

Click: Button 3 -> Survival rate on 360 day for different regions

Click: Button 4 -> Waiting Time for different regions

Click on the map: State in which region, detailed information on survival rate



Bottom Part: Information

Project Information

Liver transplant is a lifesaving procedure for many liver-damaging conditions: End stage cirrhosis, liver failure, or a cancerous lesion of the liver.
This project was initialized to reduce futility in liver transplantation and to increase the life-span and life quality of patients.

Hongtao Yang
Shijie Song
Yuning Zhu
Yifan Yang
Yu Ru
Contact: zhuyunin@usc.edu

At the bottom of the page, the following information is provided:

1. Brief introduction to the project
2. Member Information
3. Contact Information