Web based Grid binary LOgistic REgression (Web GLORE) User Manual

http://dbmi-engine.ucsd.edu/webglore2/

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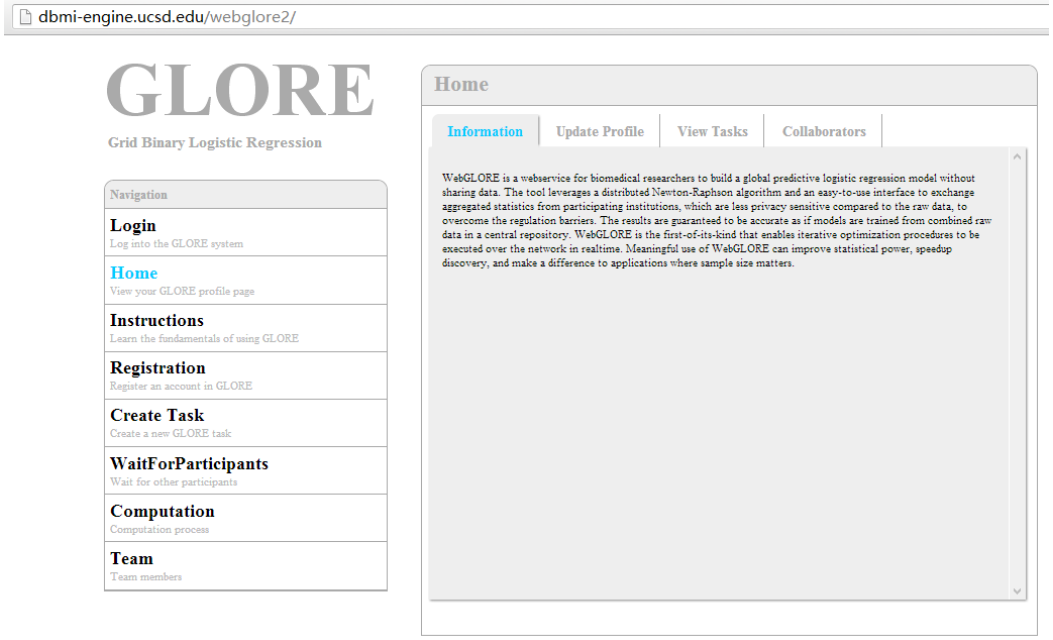
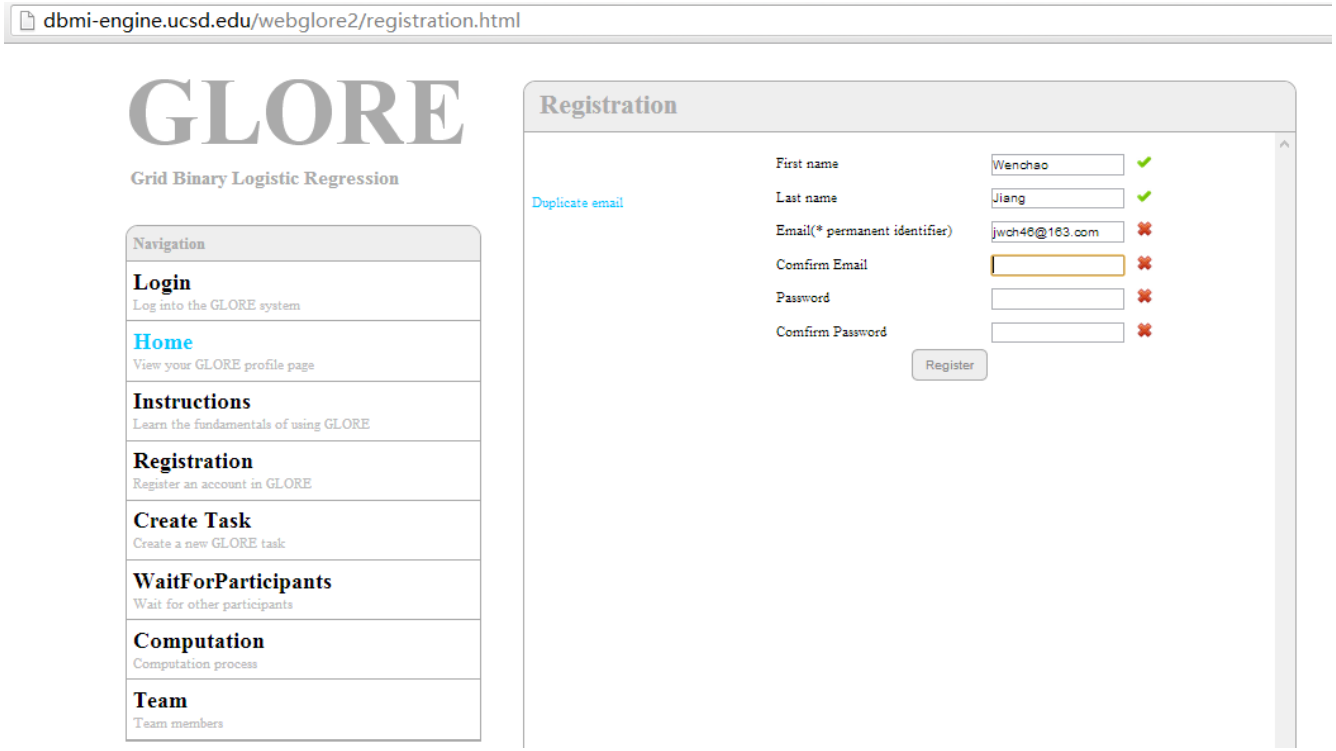
. 1. How to visit Web GLORE

- 1. Requirement: Make sure Java has been installed in your browser.
- 2. Just input http://dbmi-engine.ucsd.edu/webglore2/ in the browser to visit Web GLORE



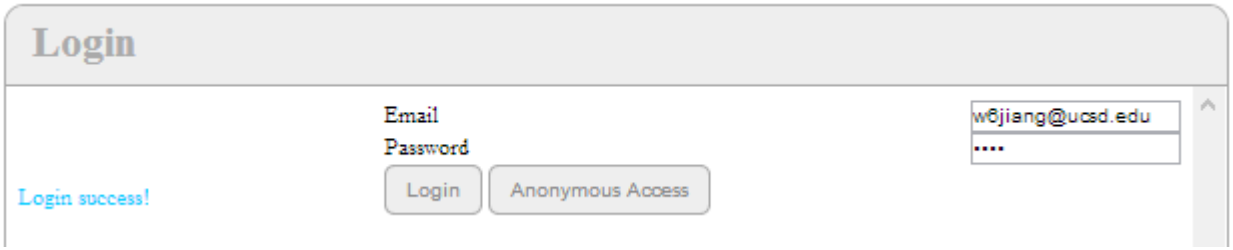
2. Register as a new user

- 1. Click registration.html, input some personal information and click “Register”.
- 2. Duplicated email address is not allowed.



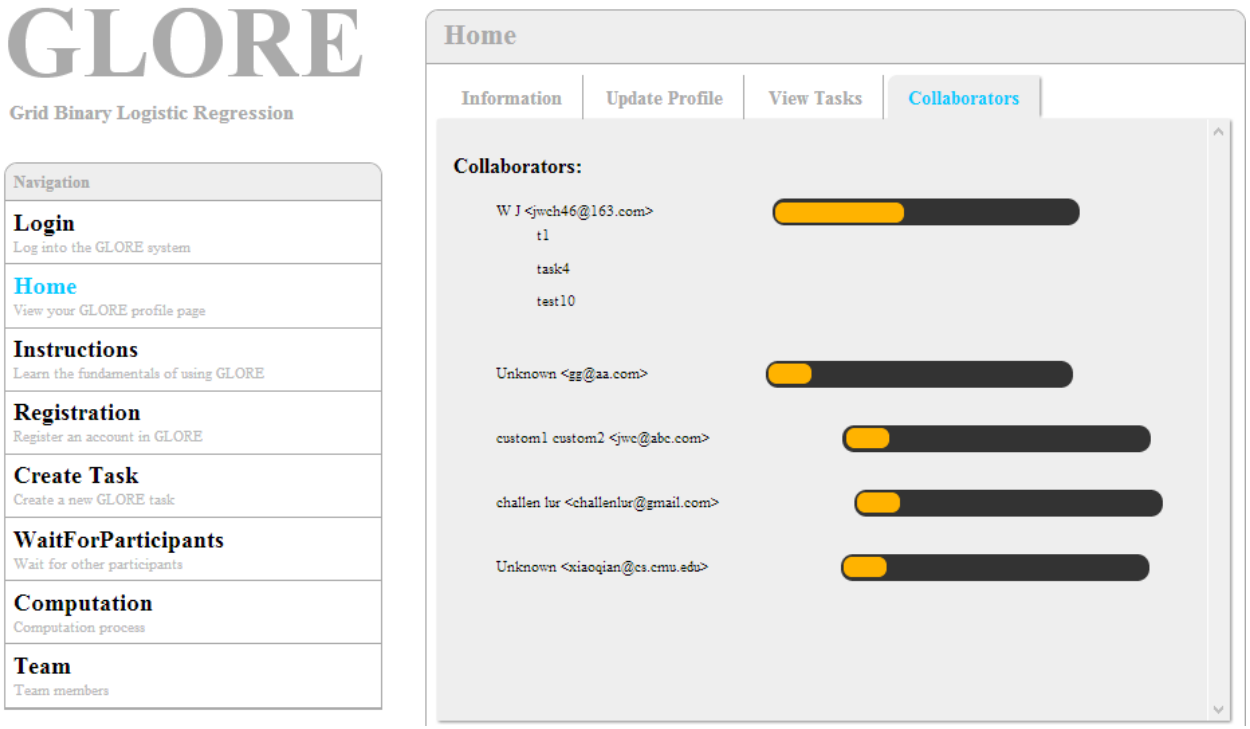
3. Login into Web GLORE

- 1. Use the registered email and password, a user can login into Web GLORE.
- 2. User can also choose to login anonymously. However, a registered user has higher authority.



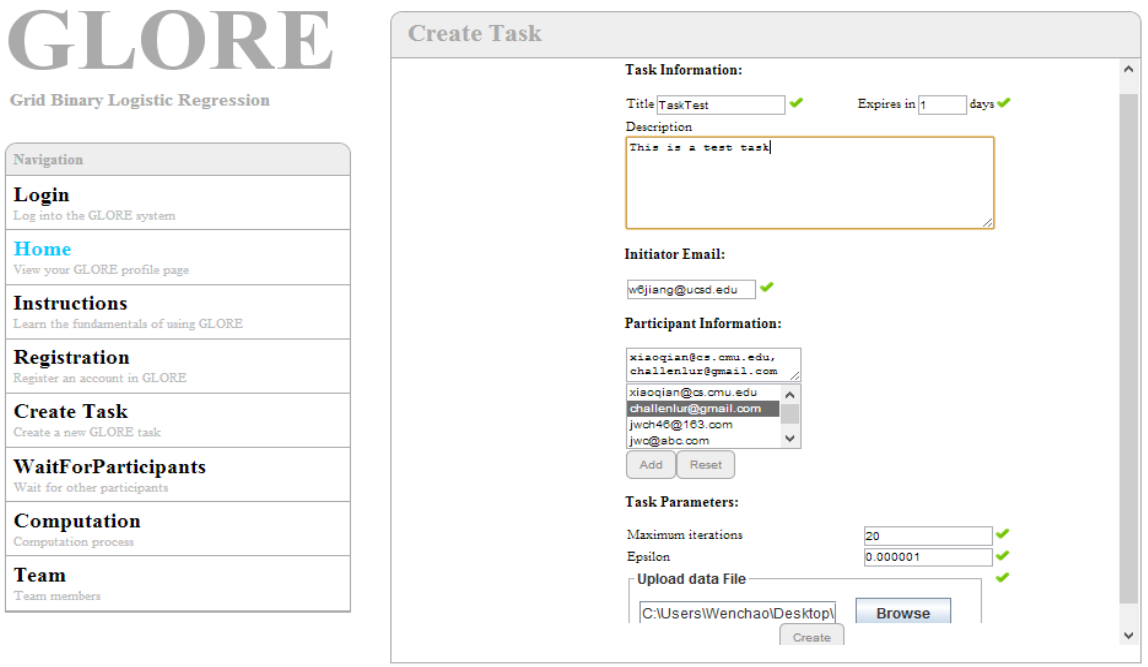
4. Manage your profile

- You can update your profile, view past tasks you joined in, and view your collaborators.



5. Create a Web GLORE task

- 1. Go to the create task page and finish the form.
- 2. You need to upload the directory address of your data. Only the first line in your file is recorded, which shows the attributes



6. Join in a Web GLORE task

- 1. All participants will receive an email with a link to join the task.

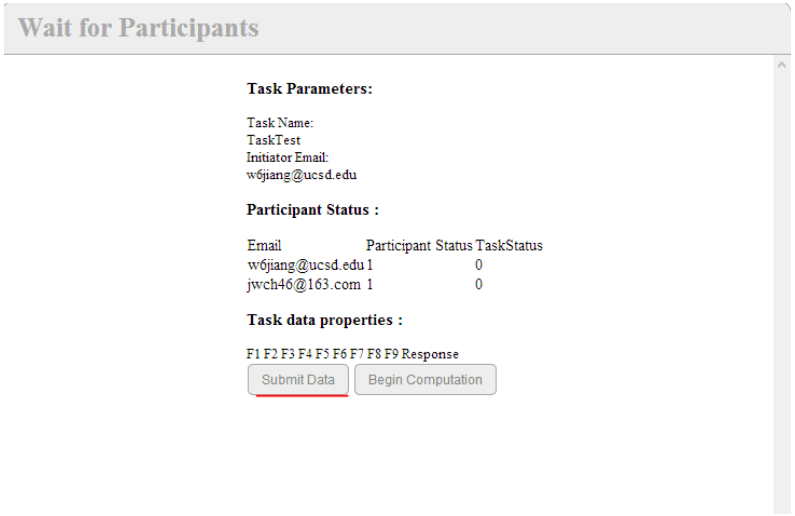
Invitation to the Grid Binary LOgistic REgression (GLORE) project ☆
gloreatucsd

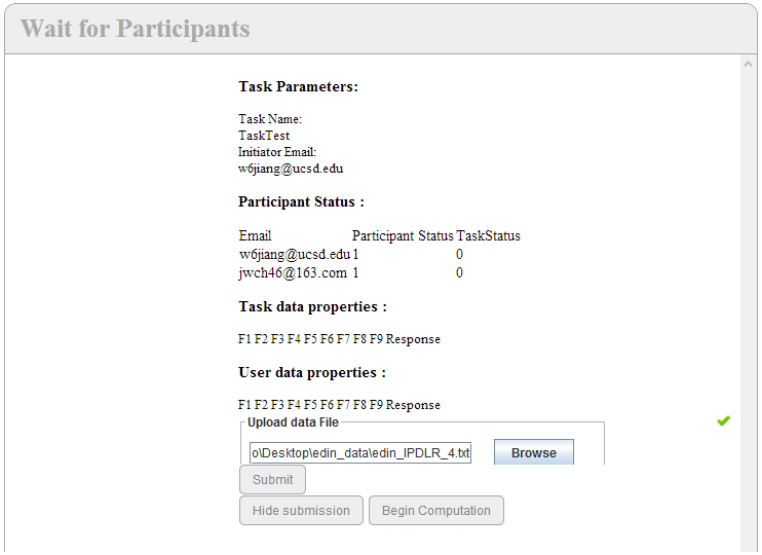
You are invited to join the task under the Grid Binary LOgistic REgression (GLORE) project, TaskTest, created by w6jiang@ucsd.edu.
Please click the link below to process your partial data OR check the task status.
Please note that the expiration time of the task is 2013-05-04 06:37:25.

http://dbmi-engine.ucsd.edu/webglore2/WaitForParticipants.html?email=jwch46@163.com&taskName=TaskTest

6. Join in a Web GLORE task (cont.)

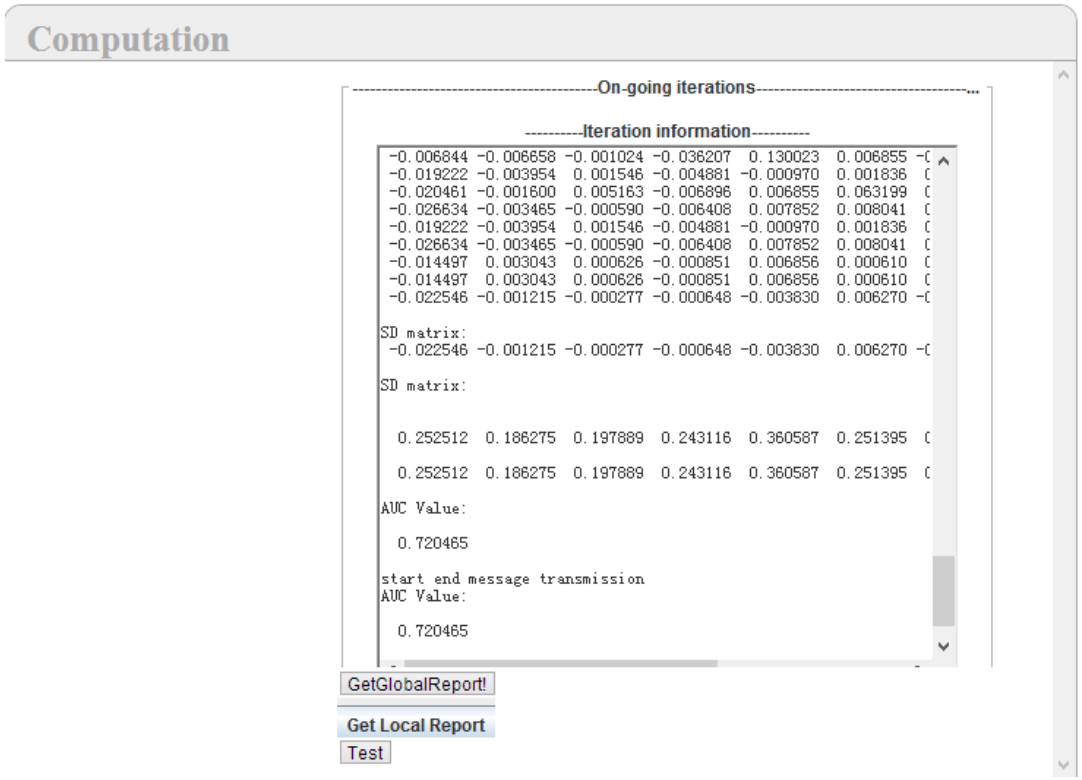
- 2. Click the link and you will be redirected to "Wait for Participants" page. You can see the status of all participants in the task.
- 3. Click "submit data" and you will be allowed to submit the your data. Web GLORE will check if your data has the same attributes with initiator's data.





7. Start task

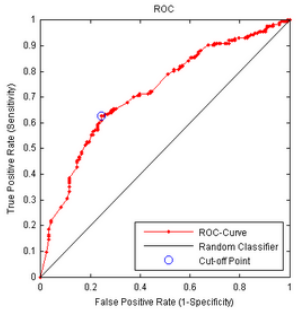
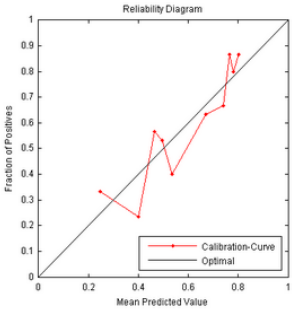
- 1. If all participants are ready, initiator can click “Begin Computation” and all participants jump to “Computation page”



8. Get reports

- 1. Web GLORE has a server to get the report of GLORE performance

GLORE performance

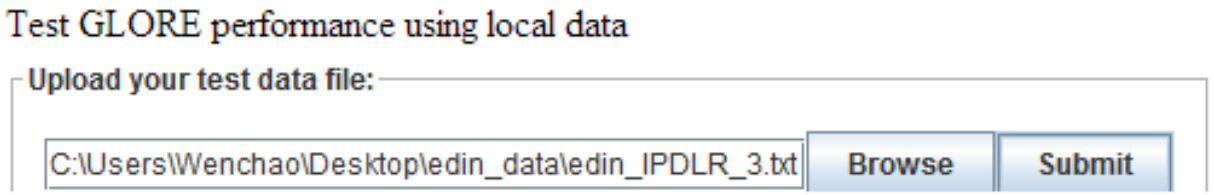
Discrimination			Calibration		
					
Discrimination at large	**Discrimination at the cut-off point** (blue circle in plot) at the probability of p = 0.6435		**Calibration** Blue numbers indicate the number of predictions per decile.		
AUC = 0.720	F-Score = 0.696		Calibration Error = 0.21		
S.D. = 0.020	Sensitivity = 0.627		Goodness of Fit Test : P-value	Hosmer-Lemeshow C-Test	Hosmer-Lemeshow H-Test
C.I. = (0.680, 0.760)	Specificity = 0.748			0.00	0.02
	Type I error = 0.373				

Attribute Statistics

Predictor	Beta	SE	Z-statistics	df	p	Odds ratio
Intercept	0.9355	0.2525	3.7049	1	0.0002	N/A
F1	0.1653	0.1863	0.8873	1	0.3749	1.1797
F2	-0.0037	0.1979	-0.0189	1	0.9849	0.9963
F3	-0.5396	0.2431	-2.2195	1	0.0265	0.5830
F4	-0.1840	0.3606	-0.5102	1	0.6099	0.8320
F5	-0.0383	0.2514	-0.1523	1	0.8790	0.9624
F6	-1.2949	0.2887	-4.4857	1	0.0000	0.2739
F7	0.1948	0.2053	0.9486	1	0.3428	1.2150
F8	-1.2453	0.1842	-6.7608	1	0.0000	0.2879
F9	0.0967	0.1951	0.4958	1	0.6200	1.1016

9. Test data

- 1. You can test your own data by click "Test" and submit the data you want to test



Predicted Probability	Y-value
0.5357577578683944	0.0
0.4954345628047826	0.0
0.4954345628047826	0.0