QUARTERLY PROGRESS REPORT

Fiscal Year 2015/2016, Quarter 2nd

Caltrans Task Manager: Christine Azevedo  Task ID/Project ID (for Caltrans use only):

Task Order No.: TO 029  Contract No.: 65A0529

1. Task Title: Analyzing Spread of Influence in Social Networks for Transportation Applications

2. Describe last quarter’s tasks/deliverables:

The official period of award for this project is from May 19, 2015 to April 1, 2016. Notice to proceed was sent only on Dec. 7, 2015. To catch up with the timeline, we hired 10 student research assistants. Liyang Hao will join the group on Feb. 8, 2016 and will work full-time. I, the PI, have been released from all my teaching duties; I am now working full-time on this project.

Although the 2nd quarter officially covers the period from October 1, 2015 to December 31, 2015, in our case, this covers December 8-31, 2015 only. During this time, the Fall quarter was ending, and students were already leaving from campus. Hence, we were not able to hire student research assistants. However, I and my co-PI, Dr. Anand Panangadan, immediately started working on the project. The tasks that we were able to accomplish were the following:

Task 1. We identified and downloaded working dataset. We determined the keywords and other search parameters that should be used to harvest user-generated messages related to transportation issues.
Task 2. We selected transportation topics of interest. We selected transportation issues that are relevant to southern Californians and which attract a relatively large amount of media attention and activity on social media networks.

There are no deliverables for the 2nd quarter.

3. Describe next quarter’s tasks/deliverables and their due dates:

The following are the tasks for the next quarter.

Task 3. We will assign location information to social media messages.
Task 4. We will build influence graph from dataset.
Task 5. We will apply influence maximization algorithms to identify sources of opinions.
Task 6. We will prepare the final report.

There are no deliverables for the next quarter.

4. Describe Project Status:
• Are you on time with your schedule?
  ☒ YES
  ☐ NO

• Are you on budget?
  ☒ YES
  ☐ NO

• Are you on scope?
  ☒ YES
  ☐ NO

If the answer to any of the above is NO, please explain below:

N/A

5. Estimated percent of work completed: 15%
   Estimated percent of budget expended: 9%

6. What are your expenditure projections for the next four quarters or until the project’s end?

<table>
<thead>
<tr>
<th>FY 15/16; Q1</th>
<th>FY 15/16; Q2</th>
<th>FY 15/16; Q3</th>
<th>FY 15/16; Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0</td>
<td>$5,618</td>
<td>$58,898</td>
<td>$1,067</td>
</tr>
</tbody>
</table>

Use this area for any additional information. Clearly identify which Section this information applies to.

N/A

Submitted By: Lourdes V. Abellera
Date: 02/01/16