

EE/CprE/SE 491 - sdmay23-35
Learning the Popularity Prediction in Information Cascades
BiWeekly Report #2
2/19/23 – 3/4/23
Client & Advisor: Goce Trajcevski

Team Members/Role:

Bailey Gorlewski, Frontend - Mapbox and ML
Evan Gossling, Frontend - UI/UX and Framework
Ian Johnson, Frontend - Design and Functionality
Paul Brinkmann, Backend - MySQL and Database
Will Postler, Backend - Integration between frontend and backend

Weekly Summary:

Over the past week, our team worked on some UI elements of the website as well as working on integrating the Machine Learning (ML) model into our website. We met with our Advisor's graduate student (Ce Le) who will be helping us with the ML model training and implementation to learn more about the process and what we need to do so we can successfully train it. As for the UI elements, we worked on implementing certain UI elements in a different way as to unify and clean up our code base. The ML model will require certain inputs, so we started looking into creating those elements for the website. We also require a server for our ML model and our website. So we have worked on obtaining said server.

Past Week Accomplishments:

Bailey attempted to train the machine learning model for a better integration, when we train it on the server. Bailey also added the needed database for training and queries into the project. Evan read ML papers given to us by Ce Le and started implementing the user input such as time series queries and time duration (of prediction model) into the UI. Ian worked on obtaining a server from ETG, and implemented more pages and navigation to the website. Will set up meetings with Ce Le and researched how to train the prediction models.

- Bailey: Attempted to train the ML model locally. Added APS dataset to our project repo, which will be used within our website, and additional mapbox research.
- Evan: Read the literature regarding the ML model that will be used within our website. Started looking into adding the required input UI elements for the website.
- Ian: Created some UI elements for the frontend website, and contacted ETG for a development server.
- Will: Setup meetings and looked into how the ML model will be trained.

Individual Contributions:

<u>Name</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>Hours cumulative</u>
Bailey Gorlewski	Attempted to train the ML model. Added APS dataset to our project repo, which will be used within our website.	6	23
Evan Gossling	Read literature and worked on adding specific UI elements.	8	25
Ian Johnson	Created some frontend UI elements for the website, and contacted ETG for a development server.	6	21
Paul Brinkmann	Attended team meetings	4	14
Will Postler	Setup meetings and looked into how the ML model will be trained.	4	15

Plans for Coming Week:

This coming week we will continue to work on training a model and getting it all setup within a database, however this depends on when we are able to get the database from ETG. We will also continue to work on the website with such UI elements as the inputs and maps/visualizations.

- Bailey: Implement the ML model locally and research mapbox more.
- Evan: Add the required input UI elements to the website.
- Ian: Finalize and setup development server and CI/CD.
- Will/Paul: Look into creating a database that can store our ML model