

Senior Design Bi-Weekly Status Report

SE/CprE 492 Weekly Report #6

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Advisors

Ali Jannesari

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Team Members:

Ahmad Alramahi - Lead Developer

Austin Boling - Meeting Facilitator

Joseph Naberhaus - Project Lead

Ekene Okeke - Report Coordinator

Ethan Ruchotzke - Documentation Manager

James Taylor - Linguistics SME

Project: POS Tagger for Software Documentation

Report Period: March 29th to April 12th

Summary of Progress (Weekly Summary)

This week marked the end of our planned work for the semester, and now we will be switching to full agile development for the remainder of the semester. This week we finished training our model, and created tests and grading APIs for investigating it. In addition, we began work on presentations and the poster for the final presentation.

Sadly, the current model only has an accuracy of 53%, so work will need to be done before the final presentation. This will mainly contain extra models for a comparison of results between them.

Meeting Notes (4-5-2021, 4-12-2021)

- Meetings cancelled - no official meetings
- Smaller individual meetings to finish up training pipeline and discuss compatibility

Pending Issues

- Spread of different trained models and their results
 - Generate several different models using the same set of training data and testing data
 - Compare results so future projects have an idea where to go with this project next
- Improve the accuracy of the current model
 - Attempt to change the tagging algorithm to only use the trained tagger on code segments

Past Week Accomplishments - Current Period - Individual Accomplishments

Our hourly work done for the current reporting period is as follows.

Who	What	Individual Hours	Cumulative Hours (Starting 2/22/2021)
Ethan	Generation of Testing API, Implementation of Testing, Converter implementation, and results gathering / analytics	12	36
Austin	Manual tagging	6	15
James	Investigating CRFs and potential solutions to increase accuracy	7	33
Ahmad	Wrote code for Training Software	15	20
Joseph	Scraper & Training	3	19
Ekene	Running the Tokenizer with data from leetcode	6 (represents hours I did not for the last biweekly report)	19

Plans for upcoming Reporting Period

Our plans for this upcoming reporting period (**March 29th - April 12th**) are broken down as follows:

Who	What	Due When
Ahmad, Ethan	Construction of other model types for range of results.	4/19/2021
Everyone	Debugging of model errors and support in training new model	4/19/2021