

Team Contributions: POC

Software Engineering

Team 13, Speech Buddies
Mazen Youssef
Rawan Mahdi
Luna Aljammal
Kelvin Yu

This document summarizes the contributions of each team member up to the POC Demo. The time period of interest is the time between the beginning of the term and the POC demo.

1 Demo Plans

For the POC Demo, we will be demonstrating the following results of our analysis and experimentation, as described in the [Development Plan document](#):

1. The word error rate (WER) on the highest accuracy open source ASR models (Whisper/Whisper-small, Wav2Vec, etc.)
2. An improved accuracy (decreased WER) proportional to some % of training - considering the machine learning scaling laws, this will give us an accurate approximation of what the model accuracy will be after training on the full dataset.
3. A demonstration of how preprocessing the dysarthric speech data may improve the model's transcription accuracy (may be demoed on tuned or un-tuned models)
4. A full training workflow plan, describing the resources and techniques we will adopt to handle the large amount of training parameters, training data, and need for high performance compute.

2 Team Meeting Attendance

Student	Meetings
Total	11
Kelvin Yu	10
Luna Aljammal	10
Mazen Youssef	11
Rawan Mahdi	11

3 Supervisor/Stakeholder Meeting Attendance

Student	Meetings
Total	6
Kelvin Yu	6
Luna Aljammal	6
Mazen Youssef	6
Rawan Mahdi	6

4 Lecture Attendance

Student	Lectures
Total	10
Kelvin Yu	5
Luna Aljammal	5
Mazen Youssef	5
Rawan Mahdi	5

Our team coordinated lecture attendance by alternating members to ensure that at least two members attended each session and took notes to share with the rest of the group. This approach allowed us to stay consistent despite midterms and other scheduling constraints. We missed three lectures in total due to overlapping supervisor meetings, which were the only times that worked for our supervisor. For these sessions, we reviewed the lecture slides and materials afterward to remain aligned with course content. Outside of these instances, attendance and lecture content were regularly communicated through our group chat and weekly meetings, ensuring all members remained informed and up to date.

5 TA Document Discussion Attendance

TA's Name: Tanya Djavaherpour

Student	Lectures
Total	3
Mazen Youssef	3
Rawan Mahdi	3
Luna Aljammal	3
Kelvin Yu	3

6 Commits

Student	Commits	Percent
Total	109	100%
Mazen Youssef	17	16%
Rawan Mahdi	31	28%
Luna Aljammal	44	40%
Kelvin Yu	17	16%

At the start of capstone, Luna and Rawan made more frequent, smaller commits, while Mazen and Kelvin made fewer but larger commits.

7 Issue Tracker

Student	Authored (O+C)	Assigned (C only)
Mazen Youssef	9	13
Rawan Mahdi	9	17
Luna Aljammal	16	12
Kelvin Yu	6	7

8 CICD

At a high level, our CI/CD uses GitHub Actions to automatically run tests (build.tex/compile-latex) on every pull request, and to build the project in a clean environment. Branch protection rules block merges until checks pass and

at least one reviewer approves. This ensures new changes don't break or regress existing functionality and remain deployable with consistent quality.

9 Team Charter Trigger Items

There are no team charter trigger items to date. The team has made good progress, but consistency in work ethic needs improvement to ensure on-time completion. A GitHub issue has been opened to revise the team charter and address this.