# Auburn USDA CS Liaison Meeting Agenda

**Date:** 10 April 2025

**Zoom Info:**

* <https://hmc-edu.zoom.us/j/91402147478?pwd=bau13Kp335ceA9YCc3AApWyI5eH6rD.1>
* Meeting ID: 914 0214 7478
* Passcode: CLINIC2025

**Meeting Goals**

* Answer questions related to the paper

**Agenda**

* Answer Dr. Cooper’s questions (pasted on the next page)

**Assigned Notetaker:** Mehrezat (Devanshi Backup)

**Dr. Cooper’s Questions**

* Data, Evaluation, & Results document
  + What percentage/amount of the files were used for training vs testing? Was the training-testing split stratified to ensure that minority waveforms would be properly distributed in both sets?
  + What is the citation for the Perry 2024 Python library that was used to import voltage data?
  + Was the post-rectification signal exclusively used for analysis?
  + What is 5-fold cross-validation and leakage between probes? I need a layman's explanation of the “Evaluation” section and how that relates to the output.
  + What method was employed to make the output comparable between the different models? In the midyear report, it was noted that the metrics were not directly comparable across different model architectures. If I was a reviewer, I would want an explanation for why in this instance, it’s valid for us to use the metrics we report to compare across models.
* Segmentation Transformer Model document -where did this model come from? I don’t have anything about this in my notes, and I do not see it in the midyear report or machine learning slides.
* UNet Report document- Before the section on “model,” there is a partial sentence that just says, “Additionally, we.” Is there anything else you want to add to that statement?
* final\_SummaryStats.csv files
  + What is the first column with only zeros in it? What do each of those zeros correspond to? There are only 5 of them (i.e., 5 rows of data), but there are six waveforms. Where does each row of that data come from? The fold things? In other words, what do the rows in the accuracy column stem from?
  + Why is precision and recall zero for N and W in RF, TNC, TR, but not UA or UB? Because there were no true positives?
* OverallCnfusionMaxtrix.png
  + Why are there numbers instead of waveform labels on the tcn\_final\_OverallConfusionMatrix.png?
  + What do the different fold versions (Fold0-Fold4) of the confusion matrix tell us? Why are they so different from each other?