

**Until ~7/20**

## **Implementation**

- Analysis scripts for codebook hierarchical structure (with visualization).
- Preprocessing scripts for annotation data:
  - Annotation statistics.
  - NLP structure alignment.
  - Visualization for statistics.
- Mapping script for inconsistencies between annotation and codebook labels.
- Data preprocessing script for training models.
- Text-to-graph conversion scripts:
  - Syntax dependency graph.
  - Semantic role graphs: weighted, predicate, clause-anchored variants.
- GCN implementation scripts.
- Error analysis scripts.
- Pre-class analysis scripts for each model type.

## **Documentation**

- GitHub documentation for scripts ([ongoing](#)).
- Paper draft (ongoing; awaiting extension from analysis).

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## **Documentation & Investigation**

- Lab connection meeting notes.
- Extended graph-based paper draft with two improvement strategies:
  1. **Method-side variations:**
    - Analyze which graph type benefits which intent classes.
    - Test context integration (adjacent only, whole message, symbolic propagation) ([on hold](#)).

- Compare graph learning methods (GCN, GAT, etc.) (**on hold**).
- Examine how symbolic context supports intent inference (**ongoing**).

## 2. Data/label optimization:

- Merge/remove consistently low-performing labels.
- Test optimized datasets from team members.
- Add multi-label support for overlapping intents.
- Evaluate sentence vs. clause-level modeling trade-offs.

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## Investigation & Implementation

- Reviewed optimized datasets from lab members:
  - Message-level annotations.
  - Combined label sets.
- Investigated public datasets with intent annotations:
  - DailyDialog.
  - CLINC150.
  - MedDialog (conversational, but lacking explicit intent labels).

## Documentation

- Extended paper draft sections on:
  - Context-involved classification.
  - Alternative graph learning models.

## Implementation

- Refactored scripts for cross-dataset reusability (consistent I/O structure).
- Facilitated easier downstream analysis and model generalization testing.

## Other Documentation

- Drafted discussion section for goal paper.

## **~8/11 (Ongoing)**

### **Documentation**

- Identified ambiguous usage of “intent” in NLP and drafted discussion for graph-based paper.

### **Implementation**

- Preprocessing scripts for:
  - Classification using optimized label hierarchies.
  - Data preprocessing for model training.

### **Investigation**

- Reviewed prior studies on different intent types and their implications for symbolic modeling.