ParlAI: A Dialog Research Software Platform

Alexander H. Miller, Will Feng, Adam Fisch, Jiasen Lu, Dhruv Batra, Antoine Bordes, Devi Parikh and Jason Weston

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Presenter: Derrick Blakely

Department of Computer Science, University of Virginia

https://qdata.github.io/deep2Read/
Why they created ParlAI

1. Make it easier to research and develop dialog systems end-to-end; from obtaining training data to replicating existing work

2. Standardize dialog system development

3. Move the field towards *general-purpose* dialog and away from specialized models
What is ParlAI?

● Imagine a classroom setting:
  ○ The teacher has questions from a question bank relating to a particular task
  ○ Teacher poses questions to a learner
  ○ The learner answers
  ○ Teacher evaluates the answers

● ParlAI uses Python to model this relationship, creating components for each of the underlined parts above
What is ParlAI?

teacher = SquadTeacher(opt)
agent = MyAgent(opt)
world = World(opt, [teacher, agent])
for i in range(num_exs):
    world.parley()
print(world.display())

def parley(self):
    for agent in self.agents:
        act = agent.act()
        for other_agent in self.agents:
            if other_agent != agent:
                other_agent.observe(act)
What is ParlAI?

- A “unified platform” -- a Python library with a set of classes
- The classes model Teacher-Learner interactions given a particular task
- API for pulling down question banks from the ParlAI repo
- Classes that can be used or modified for developing new tasks
- Working within this framework, dialog systems are standardized
Why use ParlAI?

- Easy to download datasets to train datasets (e.g., SQuAD, BaBi)
- Can train models on multiple datasets simultaneously
- Can connect with Mechanical Turk
- Can connect with Facebook Messenger
Our uses for ParlAI

- BioASQ data - questions and answers for PubMed articles and concepts from UMLS