

Understanding Language with Computers

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```
name: "RobotTalkZone"
```

Domain: conversation logs / a conversation chatbot

Task: Annotate a part of you corpus

Part of Data.json

```
data_Saskia.json      data_clara.json
14684      "position": 7
14685      },
14686      "transition_candidates": [
14687        "Yeah, I don't have any hobbies. I like to watch movies. I'm not. I'm a doctor and a researcher. What about your hobbies?",
14688        "Do you like watching movies? Does that match your taste?",
14689        "I found a movie that you would like to watch online. Do you want to watch that?",
14690        "Please confirm: watching games I found. I have a favorite. I don't have any favorite games. I'm playing these games now. What about you?"
14691      ]
14692    },
14693    {
14694      "id": "merge_0388",
14695      "dialog": [
14696        "I've never been there, but I've heard it's beautiful. What do you like about it?",
14697        "It's really beautiful, so I'm really excited to make my move to it again.",
14698        "Thanks, what is there to do nearby?",
14699        "Search found [count] things that might interest you. [attraction_name] is a [category].",
14700        "Does this place charge an entry fee?",
14701        "Yes, this place charges and entry fee.",
14702        "What else can you find?",
14703        "[attraction_name] is a [category].",
14704        "Okay, I see.",
14705        "Do you need something more?",
14706        "No, that is it. Thanks.",
14707        "Have a fun time."
14708      ],
14709      "intent": {
14710        "type": [
14711          "FindAttractions"
14712        ],
14713        "position": 8
14714      },
14715      "transition_candidates": [
14716        "It's really beautiful, so I'm really excited to make my move to it again.",
14717        "There are really people I can and heard from. But I liked the [address], and in a quiet place I'd be in. But the [address] way of living is [address] and I like it.",
14718        "I've got a place and I can't get it, what do I do for it?",
14719        "You've probably seen the place. What else should you do for your group?"
14720      ]
14721    },
14722    {
14723      "id": "merge_0381",
14724      "dialog": [
14725        "No, I don't have any pets. I'm too busy with school. What about you?",
14726        "I've a dog, his name is Oreo. What are you studying in school?",
14727        "That's a cute name! I'm studying biology. What do you do for a living?",
14728        "I play violin in a local orchestra. What kind of music do you like?",
14729        "I like all kinds of music, but I favorite is classical. Are you have been playing violin?"
14730      ]
14731    }
14732  ]
14733}
```

End part of data clara.json:

```
data_saskia.json  data.clara.json*  -  X
Schema: <Kein Schema ausgewählt>
180      "It's a zombie apocalypse show, so it's a lot of fun to watch.",
181      "My favorite genre is science fiction.",
182      "I like science fiction and fantasy books. Do you have any hobbies besides playing video games?",
183      "That's really cool. What kind of robots do you build? I like science fiction movies."
184  ],
185  "followingTags": ["Alita"]
186  },
187  {
188      "tag": "cinema",
189      "pattern": [
190          "How much is the ticket and where is this cinema located?",
191          "Please check whether there are any regular show of Dramatic story in Vine Cinema?",
192          "Please try to find any movie there at Livermore Cinema.",
193          "Hello! I'd like to see a Fantasy movie at Pruneyard Cinemas in Campbell. Can you help me find something?",
194          "Try to get a kids movie for me? I want the cheap showings at 3rd Street Cinema.",
195          "Yes and I would like to see it at Veranda LUXE Cinema.",
196          "Sure, could you search for some nice Comedy movies shown on IMAX at Embarcadero Center Cinema?",
197          "Yes and I would like to see it at Veranda LUXE Cinema."
198      ],
199      "followingTags": ["Alita", "movie"]
200  },
201  {
202      "tag": "movie",
203      "pattern": [
204          "I like playing video games as well. I also like to watch movies. What is your favorite genre?",
205          "Are you interested in watching any movie?",
206          "There are [count] movies you might like. If you like to watch [movie_name], you may like [movie_name], or [movie_name]. The movie has been released.",
207          "What type of movie would you like?",
208          "Is there any other movie?",
209          "Can you find me a funny movie to watch there?",
210          "I want to Watch How to Train Your Dragon: The Hidden World.",
211          "I Love the Godfather. It's one of my favorite movies. What's your favorite part?",
212          "What other movies are there?"
213      ],
214      "followingTags": ["Alita", "Science Fiction"]
215  },
216  {
217      "tag": "Alita",
218      "pattern": [
219          "I discovered [count] films. What is your opinion about [movie_name], [movie_name], or [movie_name]?",
220          "There are [count] films you may enjoy. Do you enjoy [title], [title], or [title]?",
221          "My favorite genre is the anime anime. My favorite is that of the movie [title].",
222          "I play [count] movie. I'm going to [title], which is an [title]."
```

End part of data_Saskia.json:

```
data_Saskia.json  X Data.json  data_clara.json
Schema: <Kein Schema ausgewählt>
80  {
81    "tag": "Science Fiction",
82    "pattern": [
83      "Speaking of sci-fi, 'Alita' offers a captivating journey into the genre. Any reasons you haven't seen it yet?",
84      "Sci-fi lovers usually appreciate the unique elements in 'Alita.' What's your take on this intriguing sci-fi universe?",
85      "Considering your interest in science fiction, 'Alita' might be the next movie night choice. Have you watched it?",
86      "Sci-fi buffs often find 'Alita' to be a hidden gem. What's stopping you from diving into this futuristic adventure?",
87      "Sci-fi conversations are incomplete without mentioning 'Alita.' Curious about this cinematic journey?"
88    ],
89    "followingTags": ["Alita"]
90  },
91  {
92    "tag": "cinema",
93    "pattern": [
94      "Movies are a great escape. Have you considered immersing yourself in the world of 'Alita'? It's quite an experience!",
95      "If you enjoy cinematic adventures, 'Alita' is a must-watch. Any particular reason you haven't seen it yet?",
96      "Let's talk about your movie preferences. 'Alita' might just be the perfect fit. What's holding you back from watching it?",
97      "Considering our chat about movies, 'Alita' seems like a movie you'd enjoy. Any plans to add it to your watchlist?",
98      "Cinematic experiences are personal. 'Alita' offers a unique one. What's your hesitation in giving it a try?"
99    ],
100    "followingTags": ["Alita", "movie"]
101  },
102  {
103    "tag": "movie",
104    "pattern": [
105      "Exploring movie preferences. 'Alita' could align with your interests. Any specific reason you haven't watched it yet?",
106      "Movies often resonate with our experiences. 'Alita' might strike a chord with you. What's keeping you from watching it?",
107      "Let's dive into genres. 'Alita' offers a blend that might catch your interest. Have you considered adding it to your watchlist?",
108      "Considering our movie chat, 'Alita' could be your next favorite. What's your reservation about giving it a try?",
109      "Movies bring people together. 'Alita' has that potential. What's holding you back from experiencing this sci-fi journey?"
110    ],
111    "followingTags": ["Alita", "Science Fiction"]
112  },
113  {
114    "tag": "Alita",
115    "pattern": [
116      "Now, let's talk about a movie that might have slipped under your radar - 'Alita.' What intrigues you about exploring this sci-fi adventure?",
117      "Have you come across 'Alita' in your movie recommendations? It's a hidden gem that deserves a spot on your watchlist!",
118      "Considering our chat, 'Alita' seems like a movie that could elevate your movie nights. Any specific questions about it?",
119      "If you haven't watched 'Alita' yet, let me share why it's worth your time. What's your take on diving into this sci-fi world?",
120      "As we wrap up, let me leave you with a movie recommendation - 'Alita.' It's a sci-fi journey that might just become a favorite. What are your thoughts on giving it a go?"
121    ],
122    "followingTags": ["done"]
123  }
```

Calculating the Cohen's Kappa involves having a confusion matrix, observed agreement probability, and expected agreement probability.

In the context of a chatbot, determining these values is challenging because there aren't clear "ground truth" or gold standard for comparison.

However, instead of a confusion matrix, we could manually evaluate a sample of interactions and categorize them into different classes based on the appropriateness or correctness of the chatbot's response. But therefore the chatbot needs to be operational and capable of generating responses which is not the case yet.

It can be noted that in the 'data_clara' approach, the chatbot comes across as more human-like, often reusing responses from users. On the other hand, the 'data_Saskia' approach gives a more sales-oriented impression, resembling a seller recommending the movie 'Alita' to the user.