

Multimodal discourse structure analysis in online written conversations

Work Breakdown Structure

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1 Analysis at the local scope (infra message)

1.1 Message structure modelisation

1.1.1 Rhetorical analysis

- Medium independent taxonomy
- Dialog act classification

1.1.2 Metadiscourse analysis

- Medium independant taxonomy
- Classification system

1.2 Object analysis

1.2.1 Problem analysis

- Question recognition
- Contextual information collection
- Resolution detection

1.2.2 Solution analysis

- Answer recognition
- Solution evaluation

1.3 Medium characterisation

1.3.1 Normalization guidelines

- Sentence detection
- Orthographic correction
- Format and redactional conventions

1.3.2 Useful specifics

- Rhetorical traits
- Structure clues

2 Analysis at the global scope (inter message / document)

2.1 Mono conversational analysis

2.1.1 Modelisation

- Link taxonomy
- Structure detection and classification
- Text unit link detection

2.1.2 Tasks

- Conversation reconstruction
- Structure detection and classification

2.2 Multi conversational analysis

2.2.1 Object alignment

- Solution-solution assimilation
- Problem-problem assimilation
- Problem-solution alignment

2.2.2 Message to monologue documents

- Question to documentation
- Answer validation

3 Ubuntu corpora construction and evaluation

3.1 Data collection

3.1.1 Data collection (multimodal and multilingual)

- Forum posts
- Emails

- Chats
- Documentation

3.1.2 Sample annotations

- Message structure
- Conversation structure
- Problem/solution information

3.2 Corpora processing

3.2.1 Standard format definition

3.2.2 Statistical analysis