Hindi Dependency Parser and Cross Lingual Learning for Marathi

Abhishek Jaiswal, A.V.S.D.S. Mahesh, Tushar Shandilya

Indian Institute of Technology Kanpur

March 1, 2020

Introduction

- Dependency Parser for Hindi
- Approaches: MaltParser, Deep learning based
- Cross-lingual learning for Marathi

Introduction

- Dependency Parser for Hindi
- Approaches: MaltParser, Deep learning based
- Cross-lingual learning for Marathi

Introduction

- Dependency Parser for Hindi
- Approaches: MaltParser, Deep learning based
- Cross-lingual learning for Marathi

1. Motivation
2. Related Work
3. Hindi Dependency Parser
4. Cross-lingual Learning
5. Results
6. Conclusion and Remarks

Table of Contents

1. Motivation
2. Related Work
3. Hindi Dependency Parser
4. Cross-lingual Learning
5. Results
6. Conclusion and Remarks

Motivation

Table of Contents

1. Motivation
2. Related Work
3. Hindi Dependency Parser
4. Cross-lingual Learning
5. Results
6. Conclusion and Remarks

Related Work

Table of Contents

1. Motivation
2. Related Work
3. Hindi Dependency Parser
4. Cross-lingual Learning
5. Results
6. Conclusion and Remarks

Shift Reduce based - Arc Eager

Neural based - Word Embeddings

Neural based

Table of Contents

1. Motivation
2. Related Work
3. Hindi Dependency Parser
4. Cross-lingual Learning
5. Results
6. Conclusion and Remarks

Cross-lingual zero shot learning

Aligning the input Word Embeddings

Table of Contents

1. Motivation
2. Related Work
3. Hindi Dependency Parser
4. Cross-lingual Learning
5. Results
6. Conclusion and Remarks

Monolingual Results

Cross-lingual Results

Table of Contents

1. Motivation
2. Related Work
3. Hindi Dependency Parser
4. Cross-lingual Learning
5. Results
6. Conclusion and Remarks

Conclusion and Remarks

Individual Contributions

Thank You