Lalchand Pandia

Github: <u>lalchand-pandia</u> website: <u>home-page</u> lcpandia@gmail.com

Education

University of Chicago

Ph.D., Natural Language Understanding

Sept 2022 - present

Advisor: Dr. Allyson Ettinger

Indian Institute of Technology Kanpur

M.Tech. Computer Science and Engineering (CSE)

2015-2017

Kalasalingam University, Krishnankoil

B.Tech.(Honours) Computer Science and Engineering (CSE)

2008-2012

Publications

Pragmatic competence of pre-trained language models through the lens of discourse connectives

Accepted at CoNLL 2021

Lalchand Pandia, Yan Cong, Allyson Ettinger

Sorting through the noise: Testing robustness of information processing in pre-trained language models

Lalchand Pandia, Allyson Ettinger Accepted at EMNLP 2021

Research Projects

Encoder based Attention Mechanism for Word Sense Disambiguation Advised by Dr Harish Karnick

- In this paper we presented the idea of transfer learning using a pre-trained BERT model to fine-tune a model for Word Sense Disambiguation.
- Used a weighted loss function to handle extreme imbalance of senses in datasets.
- Achieved state-of-the-art results on hard, line, serve, and interest datasets.

Word Sense Disambiguation by learning Long Term Dependencies

M. Tech Thesis [Supervised by Dr Harish Karnick]

Jan 2016 - Jun 2017

- We applied bi-directional LSTM to use sequence information to disambiguate senses of a polysemous word.
- Achieved better macro F1 scores than state-of-the-art on several datasets like <u>hard</u> and serve.
- We tried the same approach on selected words from One million sense tagged corpus and achieved encouraging results.

Industry experience

Huawei Technologies India Pvt. Ltd

System Architect,

Dec 2018- July 2022

- Designed the logical replication module which will be used in FileSystem to allow data replication between different FileSystem and Amazon S3.
- Coding of distributed manager for replication of data between Huawei distributed NAS storage clusters particularly focusing on functionality and performance of I/O path.

NetApp India Pvt. Ltd

Member of Technical Staff II,

July 2017- July 2018

Focused on backup of data from NetApp storage servers to backup devices such as tape using NDMP.

Tata Consultancy Services Pvt. Ltd

System Engineer, Dec 2012- June 2015

Worked on Java client-server applications dealing with insurance policies.

Teaching Experience

Teaching Assistant

Department of Computer Science, Indian Institute of Technology Kanpur

• Multiagent Systems: Games, Algorithms, Evolution (CS 785)

Spring 2017

• Design and Analysis of Algorithms (CS 602A)

Fall 2016

Achievements and Awards

- Ranked in top 0.3% (amongst 1,15,425 candidates) in Graduate Aptitude Test in Engineering(GATE), 2015, Computer Science.
- Secured 2nd rank in Computer Science and Engineering Department in Bachelor of Technology, 2012.

Skills

- Programming Languages: C, C++, Java, Python
- ML frameworks and softwares: PyTorch, numpy, scikit-learn, pandas