Jinfen Li

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EDUCATION

Syracuse University, Syracuse, NY   **Aug 2021 - Present**

Ph.D. in Information Science and Technology

Syracuse University, Syracuse, NY   **Aug 2018 - June 2020**

Master of Computational Linguistics

Guangdong University of Technology, China   **Sep 2014 - June 2018**

Bachelor of Technology in Computer Science & Engineering

PUBLICATIONS

Upcoming WebSci Conference

- **Li, Jinfen**, and Lu Xiao. "MEmoBERT: Multi-emotion Recognition With Label Correlation and Emotion Analysis in Fake News."

Conference & Workshop Paper

- Xiao, Lu, Qiyi Wu, Sucheta Soundarajan and **Jinfen Li**. "Language Use and Susceptibility in Online Conversation." Science and Information Conference. Springer, Cham. 2022.

- **Li, Jinfen**, and Lu Xiao. "Neural-based RST Parsing And Analysis In Persuasive Discourse." Proceedings of the Seventh Workshop on Noisy User-generated Text (W-NUT 2021). 2021.

- **Li, Jinfen**, and Lu Xiao. "Tree Representations in Transition System for RST Parsing." *Proceedings of the 28th International Conference on Computational Linguistics (COLING)*. 2020.

- **Li, Jinfen**, and Lu Xiao. "syrapropa at SemEval-2020 Task 11: BERT-based Models Design for Propagandistic Technique and Span Detection." *Proceedings of the Fourteenth Workshop on Semantic Evaluation (*SEMEVAL | COLING)*. 2020.

- **Li, Jinfen**, and Lu Xiao. "Emotions in online debates: Tales from 4Forums and ConvinceMe." *Proceedings of the Association for Information Science and Technology 57.1 (ASIS&T)*. 2020.

- **Li, Jinfen**, Zhihao Ye, and Lu Xiao. "Detection of Propaganda Using Logistic Regression." *EMNLP-IJCNLP 2019*. 2019.

- Ye, Zhihao, Ruichu Cai, Zhaohui Liao, Zhifeng Hao, **Jinfen Li**. "Generating natural answers on knowledge bases and text by sequence-to-sequence learning." *International Conference on Artificial Neural Networks. Springer, Cham*, 2018.

HONORS & AWARDS

- Top five places in SEMEVAL 2020 Task "detection of propaganda techniques in news articles".   2019
- Excellent undergraduate thesis.   2018
- Honorable mention for mathematical contest in modeling (MCM).   2017
- First prize university level scholarship.   2015, 2016, 2017, 2018

EXPERIENCE

Research Assistant, Syracuse University, USA   **Jan 2019 - Present**

- Researched on XAI for fake news detection and NLP tasks such as emotion recognition, propaganda span and technique detection, and discourse parsing.

- Conducted data analysis such as emotion and discourse analysis in persuasion debates and fake news using statistical analysis methods.

- Developed rule-based chatbot for Bible study and designed artificial empathy feature, and solicited responses from users through questionnaire and interview.

- Parsed discourse tree using innovative labeling strategies and neural networks, which achieved **state-of-the-art** performance.

- Proposed cost-sensitive algorithms and built **BERT-based** models for propaganda and span detection/sequence labeling.

- Proposed **Multi-channel BLSM with Attention**, **emotion correlations** layer and **sentiment composition** layer for **Multi/Single Emotion Recognition**.

Teaching Assistant, Syracuse University, USA   Aug 2021 - Present

- Applied Deep Learning: transformed Keras-based lab materials to PyTorch framework
- Natural Language Processing: built lab materials for word embedding, multi-channel CNN and BiLSTM, and developed slide and coding tutorial for chatbots such as Rasa, Juji and GPT-2.

Machine Learning Engineer, Flamingo Internet Corporation, China   June 2017 - May 2018

- Extracted value from data and developed models for game grade system and stock prediction, using Machine Learning.
- Processed stock economic data with **Pandas** and built **LSTM** for trend prediction, which increased profit by 20% than traditional strategies.
- Contributed to a system of Chinese game grade to assist game promotion, using **RandomForest, SVM** and feature engineering such as **LDA, Jieba, N-gram**.

Software Engineer, Guangdong University of Technology, China   May 2015 - May 2017

- Independently developed web applications such as a chatroom with persuasion detection, using **Flask, PostgreSQL, JS, CSS**, and an email spam detector using **PySpark**; deployed webapps to Heroku or Tomcat.
- Developed a product recommendation system for Alibaba users using **Logistics Regression**.
- Provided Java backend service for school management platforms using **SpringMVC and MyBatis**, with more than **10,000** users.

Open-source Tools

- **Neural Discourse Parsing**: A RST Discourse Parser using neural network.
- **Discourse Parsing with ML**: A RST Discourse Parser using machine learning.
- **Single Emotion Recognition**: A single emotion recognition tool using multiple channels BiLSTM.

SKILLS

- **Languages**: Python, SQL, Java, Javascript
- **Libraries and Web Development**: Pytorch, TensorFlow, Keras, Numpy, Pandas, Spark; HTML, CSS, jQuery, Flask
- **Models**: BERT, SpanBERT, RoBERTa, Transformer, XLNet, ELMo, SeqGan, Seq2Seq, LSTM, Word2Vec, CNN, Attention