

# Irene(Zihui) Li | Résumé

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## Education

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### Yale University, USA

*PhD Student (advised by Prof. Dragomir Radev),* Aug. 2017 - Now  
Research topics include natural language processing and graph neural networks; other interests are transfer learning, domain adaptation, summarization, general machine learning and NLP with clinical data (EHRs).

### Yale University, USA

*Masters in Philosophy (M.Phil),* Aug. 2017 - Mar. 2020  
Research topics include natural language processing and graph neural networks.

### University College Dublin, Ireland

*Master Degree of Science,* Sept. 2014 - Aug. 2015  
Majoring in Data Science. Thesis: *An Online Segmentation Method using Dynamic Time Warping.* **First Honor Degree**

### Wuhan Polytechnic University, China

*Bachelor Degree of Management (First Degree),* Sept. 2010 - Jun. 2014  
Bachelor's Degree of English Language and Literature (Secondary Degree) **Top 5%**

## Publications

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**Irene Li**, Alexander Fabbri, Swapnil Hingmire, and Dragomir Radev. *R-VGAE: Relational-variational Graph Autoencoder for Unsupervised Prerequisite Chain Learning*. COLING, 2020

**Irene Li**, Yixin Li, Tianxiao Li, Sergio Alvarez-Napagao, Dario Garcia-Gasulla, Toyotaro Suzumura. *What are We Depressed about When We Talk about COVID-19: Mental Health Analysis on Tweets Using Natural Language Processing*. Fortieth SGA International Conference on Artificial Intelligence, 2020

**Irene Li**, Michihiro Yasunaga, Yavuz Nuzumlali, Cesar Caraballo, Shiwani Mahajan, Krumholz, Harlan and Dragomir Radev. *A Neural Topic-Attention Model for Medical Term Abbreviation Disambiguation*. NeurIPS 2019 Machine Learning for Health Workshop (extended abstract)

Alexander Fabbri, **Irene Li**, Tianwei She, Suyi Li and Dragomir Radev. *Multi-News: a Large-Scale Multi-Document Summarization Dataset and Abstractive Hierarchical Model*. Proceedings of ACL, 2019

**Irene Li**, Alexander Fabbri, Robert Tung and Dragomir Radev. *What Should I Learn First: Introducing LectureBank for NLP Education and Prerequisite Chain Learning*. Proceedings of AAAI, 2019

Alexander Fabbri, **Irene Li**, Prawat Trairatvorakul, Yijiao He, Wei Tai Ting, Robert Tung, Caitlin Westerfield and Dragomir Radev. *TutorialBank: A Manually-Collected Corpus for Prerequisite Chains, Survey Extraction and Resource Recommendation*. Proceedings of ACL, 2018

Mark Hughes, **Irene Li**, Spyros Kotoulas and Toyotaro Suzumura. *Medical Text Classification using Convolutional Neural Networks*. Informatics for Health Conference, 2017

## Experience

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### **IBM Research Almaden, USA**

*Research Intern*

*June 2019 – Aug 2019*

Interned in the Scalable Knowledge Intelligence team, and worked on cross-lingual classification tasks for IBM SystemT.

### **Baidu Inc., Beijing, China**

*Research Intern (Natural Language Processing Group)*

*June 2018 – Aug. 2018*

Worked on text summarization with transfer learning.

### **Accenture AI TechLab, Ireland**

*Research Engineer*

*Apr. 2017 – Jul. 2017*

Worked on applied deep learning models: time-series data analysis/ prediction using LSTM, representation learning on structural data, natural language processing on specific domain texts using CNN and attention-based model.

### **Adapt Data Center, Ireland**

*Junior Researcher*

*Mar. 2016 – Feb. 2017*

Research topic including recommendation systems, domain adaptation and NLP.

### **IBM Research Dublin, Ireland**

*Research Intern (Care Manager Team jointly with IBM Watson)*

*June 2016 – Aug. 2016*

Worked with deep learning models in the healthcare domain, developed CNNs to classify clinical sentences.

## Professional Skills

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**Programming:** Python, PyTorch, TensorFlow

**Techniques:** Natural Language Processing, Deep Learning, Neural Graph Networks, Summarization, Machine Learning, Transfer Learning

## Languages

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**Chinese:** Native

**English:** Fluent

## Links

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**Google Scholar:** <https://scholar.google.com/citations?user=JuYPjCMAAAAJhl=en>

**Linkedin:** <https://ie.linkedin.com/in/irenelizihui>

**Github:** <https://github.com/IreneZihuiLi>

**Blog:** [ireneli.eu](http://ireneli.eu)