LINGJUN ZHAO

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Cambridge MA

EDUCATION

University of Maryland, College Park   *Jan 2021 - present*
Ph.D. student in Computer Science

Columbia University, New York   *Sep 2016 - Dec 2017*
M.S. in Computer Science
Excelled in Selected Coursework: Natural Language Processing · Advanced Machine Learning · Deep
Learning for Computer Vision · Advanced Database Systems

Sun Yat-Sen University, Guangzhou, China   *Sep 2012 - Jun 2016*
B.S. in Computational Mathematics
Visiting student at University of California, Berkeley   *Fall 2014*
Excelled in Selected Coursework: Multivariate Statistics · Mathematical Optimization · Numerical
Analysis / Algebra / Approximation · Real Analysis · Digital Image Processing

EXPERIENCE

Staff Scientist II   Mar 2018 - Dec 2020
Raytheon BBN Technologies   *Cambridge, MA*

· Designed and built a character-level CNN context-aware lexical translation model, effective for the
  probabilistic cross-lingual information retrieval (CLIR) in the IARPA MATERIAL program
· Designed and built a weakly supervised attentional model for CLIR, trained with samples extracted
  from parallel translation sentences to estimate CLIR relevance
· Developed a neural CLIR model using relevance outputs from the unsupervised probabilistic CLIR
· Developed a CLIR diagnostic tool and lexical translation evaluation metrics for CLIR
· Trained and tuned a siamese neural model for the event mention retrieval
· Developed a probabilistic event IR model for the IARPA BETTER program evaluation

Data Science Intern   July 2017 - Aug 2017
Pacific Northwest National Laboratory   *Richland, WA*

· Developed neural relation extraction attentional models with LSTM and CNN for feature extraction
· Evaluated to have competitive results on both SemEval-2017 Task 10 and SemEval-2010 Task 8

Research Assistant   Sep 2016 - Dec 2016
Columbia University, Advisor: John Kender   *New York, NY*

· Applied Viola-Jones face detection to generate upper body bounding boxes for upper body pose esti-
  mation in TED Talk videos. Derived upper bounding box scaling and filtered interesting frames
· Approximated the exponential distribution and matrix symmetricity of interesting frames duration

Bachelor's Thesis Project   Nov 2015 - May 2016
Sun Yat-Sen University, Advisor: Guocan Feng   *Guangzhou, China*

· Designed and built a CNN human face tracking model, applied to public surveillance videos

PUBLICATIONS

B. Min, Y. Chan, **L. Zhao**. "Towards Few-Shot Event Mention Retrieval: An Evaluation Framework and A Siamese Network Approach." LREC 2020. (link)

Z. Jiang, A. EI-Jaroudi, W. Hartmann, D. Karakos, **L. Zhao**. "Cross-lingual Information Retrieval with BERT." LREC 2020 Cross-Language Search and Summarization of Text and Speech Workshop. (link)

L. Zhao, R. Zbib, Z. Jiang, D. Karakos, Z. Huang. "Weakly Supervised Attentional Model for Low Resource Ad-hoc Cross-lingual Information Retrieval." EMNLP 2019 Deep Learning Approaches for Low-Resource NLP Workshop. (link)

R. Zbib, **L. Zhao**, D. Karakos, W. Hartmann, J. DeYoung, Z. Huang, Z. Jiang, N. Rivkin, L. Zhang, R. Schwartz, J. Makhoul. "Neural-Network Lexical Translation for Cross-lingual IR from Text and Speech." SIGIR 2019. (link)

AWARDS

- e Prize & First Prize (top 3%), Asia Student Supercomputer Challenge, 2015
- Scholarship for Outstanding Students (top 15%), Sun Yat-Sen University, 2015
- Second Place (top 3%), Mathematical Contest in Modeling, Sun Yat-Sen University, 2012

SERVICES

- Volunteer of Computer Science graduate admissions, University of Maryland, 2020
- Reviewer of ACM TALLIP 2019, Secondary Reviewer of EMNLP 2018
- Director of Computational Science Society, Sun Yat-Sen University, 2013

SKILLS

Programming Languages	PYTHON, C++, C, MATLAB, PERL
Machine Learning Libraries	Tensorflow, Keras, Pytorch, scikit-learn, NLTK
Other Tools	Git, Vim, Jupyter, CUDA, NumPy, LATEX