Weiwei YANG

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CURRENT POSITION

Zhejiang Lab

Hangzhou, Zhejiang, China

Research Expert, Research Center for High-Efficiency Computing Systems

01/2024—Present

• Leading the Algorithm & Framework Team to build high-efficiency distributed deep learning framework for training and serving LLMs.

Research Expert, Research Center for Intelligent Computing Software

2023/07-2024/01

PROFESSIONAL TITLE

Assistant Researcher

Under Review

EDUCATION

University of Maryland

College Park, MD, USA 08/2014—05/2017

M.Sc. in Computer Science Ph.D. in Computer Science

08/2014--08/2019

Co-Advisors: Prof. Philip Resnik and Prof. Jordan Boyd-Graber

Dissertation: Connecting Documents, Words, and Languages using Topic Models

Advanced to Candidacy on May 3, 2018 Dissertation Defended on May 9, 2019

Tsinghua University

Beijing, China

B.Eng. in Computer Science & Technology Honor: Excellent Bachelor's Thesis Award 08/2009-07/2013

RESEARCH EXPERIENCE

University of Maryland

College Park, MD, USA

01/2015 - 05/2019

Graduate Research Assistant, CLIP Lab

- Co-Advisors: Philip Resnik and Jordan Boyd-Graber
- Topic models, Bayesian methods, and computational linguistics in computational social science

Tsinghua University

Beijing, China

Undergraduate Research Assistant, IAR Team

02/2013-03/2014

- Advisor: Hua Xu
- Micro-blog user clustering using latent Dirichlet allocation.
- Hierarchical emotion classification and emotion component analysis on Chinese micro-blog posts.

Undergraduate Research Assistant, Information Retrieval Team

10/2011 - 12/2011

- Advisor: Shaoping Ma
- Impact analysis of Sina Weibo users using PageRank.

Stanford University

Stanford, CA, USA

 $Undergraduate\ Visiting\ Researcher,\ Artificial\ Intelligence\ Lab$

06/2012 - 08/2012

- Advisor: Andrew Ng
- Matlab library of basic matrix operations implemented in CUDA.
- Time-series modeling using deep learning.

Last Update: April 7, 2024

WORK EXPERIENCE

Meta Platforms Inc.

Menlo Park, CA, USA 06/2019—06/2023

Senior Research Scientist, Messaging Product Machine Learning

- Improve user engagement on Messenger and Instagram, example projects:
 - List-wise ranking with LambdaRank
 - Improve model ranking performance with recurring training
 - Use TTSN to improve ranking performance and save resource cost

Google Inc. Mountain View, CA, USA

Software Engineering Intern, YouTube Engineering Team

05/2018 - 08/2018

• Mentor: Yundi Qian

• YouTube video comments ranking using deep learning.

Comcast Labs Washington, DC, USA Research Intern, NLP Team 05/2017—08/2017

• Mentor: Ferhan Ture

• Representation learning of closed captions.

FiscalNote Inc. Washington, DC, USA
Data Science Intern, Data Science Team 06/2016—08/2016

• Mentor: Vladimir Eidelman

- Authorization and citation link prediction between US statutes and regulations.
- Sentiment analysis and support/oppose classification on US regulation comments.

PUBLICATIONS

Weiwei Yang, Jordan Boyd-Graber, and Philip Resnik. A Multilingual Topic Model for Learning Weighted Topic Links Across Corpora with Low Comparability. Empirical Methods in Natural Language Processing and International Joint Conference on Natural Language Processing (EMNLP-IJCNLP), 2019, Hong Kong SAR, China.

Weiwei Yang, Jordan Boyd-Graber, and Philip Resnik. Adapting Topic Models using Lexical Associations with Tree Priors. Empirical Methods in Natural Language Processing (EMNLP), 2017, Copenhagen, Denmark.

Lingzi Hong, Weiwei Yang, Philip Resnik, and Vanessa Frias-Martinez. Uncovering Topic Dynamics of Social Media and News: The Case of Ferguson. International Conference on Social Informatics (SocInfo), 2016, Bellevue, WA, USA.

Weiwei Yang, Jordan Boyd-Graber, and Philip Resnik. A Discriminative Topic Model using Document Network Structure. Association for Computational Linguistics (ACL), 2016, Berlin, Germany.

Weiwei Yang, Jordan Boyd-Graber, and Philip Resnik. Birds of a Feather Linked Together: A Discriminative Topic Model using Link-based Priors. Empirical Methods in Natural Language Processing (EMNLP), 2015, Lisbon, Portugal.

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PRESENTATIONS

[Talk] A Multilingual Topic Model for Learning Weighted Topic Links Across Corpora with Low Comparability. Empirical Methods in Natural Language Processing and International Joint Conference on Natural Language Processing (EMNLP-IJCNLP), Hong Kong SAR, China, November 5, 2019.

[Poster] Adapting Topic Models using Lexical Associations with Tree Priors. Empirical Methods in Natural Language Processing (EMNLP), Copenhagen, Denmark, September 10, 2017.

[Talk] A Discriminative Topic Model using Document Network Structure. Association for Computational Linguistics (ACL), Berlin, Germany, August 8, 2016.

[Poster] Birds of a Feather in the Same Nest: A Discriminative Topic Model using Blockbased Priors. Mid-Atlantic Student Colloquium on Speech, Language, and Learning (MASC-SLL), Philadelphia, PA, USA, April 1, 2016.

[Poster] Birds of a Feather Linked Together: A Discriminative Topic Model using Link-based Priors. Empirical Methods in Natural Language Processing (EMNLP), Lisbon, Portugal, September 19, 2015.

TEACHING EXPERIENCE

Department of Computer Science, University of Maryland Graduate Teaching Assistant (Instructor: Evan Golub) CMSC131 Object-Oriented Programming	College Park, MD, USA Fall 2014
Department of Computer Science & Technology, Tsinghua University Undergraduate Teaching Assistant (Instructor: Junhui Deng) 30240184 Data Structures and Algorithms	Beijing, China Spring 2011
HONORS AND AWARDS	
Second Prize, Ghost Hunter Competition, Tsinghua University Dean's Fellowship, University of Maryland, College Park Excellent Bachelor's Thesis Award, Tsinghua University Scholarship for Progress in Study, Tsinghua University Memorial Award, Sohu Cup Artificial Intelligence Program Competition Group Champion, Ma Yuehan Cup Chess Competition, Tsinghua University	05/2020 $09/2014$ $06/2013$ $09/2011$ $05/2011$ $04/2010$
SERVICES	
Reviewer/External Reviewer	
• Association for Computational Linguistics (ACL)	2018, 2019, 2020, 2021
• Empirical Methods in Natural Language Processing (EMNLP)	2015, 2018, 2020
• AAAI Conference on Artificial Intelligence (AAAI)	2020
• Conference on Computational Natural Language Learning (CoNLL)	2018, 2019
• North American Chapter of the Association for Computational Linguistic	es (NAACL) 2019
• International Conference on Computational Linguistics (COLING)	2018
• Mid-Atlantic Student Colloquium on Speech, Language, and Learning (M	IASC-SLL) 2018
• European Chapter of the Association for Computational Linguistics (EAG	CL) 2017
Student Volunteer	
• Association for Computational Linguistics (ACL)	2016
• Admission Office of Tsinghua University, Zhejiang Branch	2013

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