

Mu Yang

Research Assistant

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Education

- 2015–2017 **Master of Science**, *Institute of Applied Mathematical Sciences, National Taiwan University*, Taipei, Taiwan.
GPA 3.24/4.30
- 2011–2015 **Bachelor of Science**, *Department of Mathematics, National Taiwan University*, Taipei, Taiwan.
GPA 4.03/4.30

Experience

Vocational

- 2017–present **Research Assistant**, *CKIP Lab, Institute of Information Science, Academia Sinica*, Taipei, Taiwan.
Supervised by Dr. Wei-Yun Ma, conducting researches of natural language processing and computational linguistics
- 2015 **Internship**, *Thomas J. Watson Research Center, IBM Corporation*, Yorktown Heights, NY, USA.
Supervised by Dr. I-Hsin Chung, conducting researches of high-performance parallel computing on hybrid CPU-GPU structures

Miscellaneous

- 2013–2017 **Research Assistant**, *Institute of Applied Mathematical Sciences, National Taiwan University*, Taipei, Taiwan.
Supervised by Prof. Weichung Wang, conducting researches of high-performance parallel computing on hybrid CPU-GPU structures
- 2016 **Research Assistant**, *Department of Economics, National Taiwan University*, Taipei, Taiwan.
Supervised by Prof. Semin Kim, conducting researches of ordinal versus cardinal voting rules
- 2015–2017 **Teaching Assistant**, *National Taiwan University*, Taipei, Taiwan.
Courses: Software Development for Computational and Data Science, High Performance Computing and Deep Learning, Introduction to Computational & Data Sciences, Introduction to Scientific Computing, Numerical Linear Algebra, Introduction to Computational Mathematics, Computer Programming, Mathematic Software, Calculus

Publications

- (submitted) **Headword-Oriented Entity Linking: A New Entity Linking Task with Dataset and Baseline.**
Mu Yang, Chi-Yen Chen, Yi-Hui Lee, Qian-Hui Zeng, Wei-Yun Ma
- 2019 **HWE: Word Embedding with Heterogeneous Features.**
Jhih-Sheng Fan, Mu Yang, Peng-Hsuan Li, Wei-Yun Ma
13th IEEE International Conference on Semantic Computing (ICSC'19)
- 2017 **Highly Scalable Parallelism of Integrated Randomized Singular Value Decomposition with Big Data Applications.**
Mu Yang, (Advisor: Weichung Wang)
Master's Thesis, National Taiwan University
- 2016 **Particle Swarm Stepwise Algorithm (PaSS) on Multicore Hybrid CPU-GPU Clusters.**
Mu Yang, Ray-Bing Chen, I-Hsin Chung, Weichung Wang
16th IEEE International Conference on Computer and Information Technology (CIT'16)

Awards

- 2018–2019 **Top 2 Short Answer, Top 3 Multiple Choice, Out of 143 Teams.**
Formosa Grand Challenge (Chinese TOEFL-like listening comprehension QA)
- 2016 **Presentation Excellence Award.**
7th Taiwan-Japan Joint Workshop for Young Scholars in Applied Mathematics
- Fall 2011 **Top 1 Academic Excellence Award.**
Department of Mathematics, National Taiwan University

Selected Projects

- 2017–2018 **HWE: Heterogeneous Word Embedding.**
A general and flexible framework of word embeddings to incorporate each type (e.g. word-sense, part-of-speech, topic) of contextual feature for learning feature-specific word embeddings in an explicit fashion.
- 2017–2018 **CosmEL: Cosmetic Entity Linking.**
A novel entity linking project on cosmetic domain with dataset and baseline. An industrial-academic project with PIXNET Corporation.
- 2015–2017 **iSVD: Integrated Singular Value Decomposition Algorithm.**
A parallel low-rank approximate singular value decomposition solver using integrated randomized algorithm. Implemented for multinode hybrid CPU-GPU systems.
- 2013–2015 **PaSS: Particle Swarm Stepwise Algorithm.**
A parallel stochastic search algorithm for information criterion variable selection problems. Implemented for multinode hybrid CPU-GPU systems.

Languages

- Chinese Native Proficiency
- English Limited Working Proficiency