

# HANSI ZENG

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[Homepage](#) ◇ [Github](#)

## EDUCATION

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<b>Nankai University, China</b> Major in Mathematics	<b>Bachelor</b> 09/2014-06/2017
<b>University of Wisconsin Madison</b> Major in Mathematics	<b>Visiting Student</b> 09/2017-06/2018
<b>University of Wisconsin Madison</b> Major in Mathematics	<b>Master</b> 09/2018-06/2019
<b>University of Utah</b> Major in Computer Science	<b>Master</b> 09/2019-06/20021

## RESEARCH EXPERIENCE

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**University of Utah, School of Computing, utahIR Lab** 09/2019-Present  
*Research Assistant, advised by Prof. Qingyao Ai*

- Build a toolbox for the e-commerce product search containing several state-of-art neural network based models.
- Write a short conference paper for review-based recommendation where the main technique we use is transformer-like model.
- Write a full conference paper based on the previous work. In this work, we use text relevance matching originated from IR community for better user and item modeling. Also, other techniques like zero-attention, multi-task learning are added for boosting model performance.

## PROJECTS

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**Toolbox for E-commerce Product Search** [github repo](#) 09/2019-12/2020  
*Independent Study, advised by Professor Qingyao Ai, School of Computing, University of Utah*

- Help professor to build a toolbox for e-commerce product search.
- The toolbox implements several state-of-art models by TensorFlow with thorough hyperparameter tuning and performance comparison.
- The main techniques used in the models are doc2vec, attention network, knowledge graph embedding.

**Toolbox for Text Semantic Matching** [github repo](#) 04/2020-Present  
*Extracurricular Activity*

- Implement several state-of-art for review-based recommendation system like NARRE, DeepCoNN using Pytorch with hyperparameter tuning and performance comparison.
- Organize the the toolbox for easy training, hyperparameter tuning and model extension.
- Severed as strong baselines for our new proposed model in research.

**Toolbox for Review-Based Recommendation System** [github repo](#) 05/2020-Present  
*Extracurricular Activity*

- Implement several state-of-art text semantic matching model like RE2, CAFE, ESIM using Pytorch with performance comparison.
- Organize the the toolbox for easy training, hyperparameter tuning and model extension.

## Graph2vec for KEGG Pathway Topology Discovery

01/2018-06/2018

*Advanced Bioinformatics project, Lab of Anthony Gitter, Department of Biostatistics and Medical Informatics, University of Wisconsin Madison*

- Employ graph2vec algorithm to process the KEGG pathways.
- Designed an entire process workflow for the classification task where we distinguish actual KEGG pathways from artificial ones.

## PUBLICATIONS

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- **Hansi Zeng**, Qingyao Ai. A Hierarchical Self-attentive Convolution Network for Review Modeling in Recommendation Systems.
- **Hansi Zeng**, Zhichao Xu, Qingyao Ai. A Zero Attentative Relevance Matching Network for Review Modeling in Recommender System. (submitted to ECIR 2020)

## TEACHING EXPERIENCES

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- Teaching Assistant of ECE 3530 Engineering Probability and Statistics Fall 2020, UoU

## SKILLS

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**Computer Languages** Python/Java/R/C++/JavaScript/MATLAB/Linux/Unix.

**GRE** Verbal:153, Quantitative:168, Analytical Writing: 3.0

## AWARDS

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Second-class Scholarship, Nankai University 2015-2016

University Student Table Tennis Team Competition in Tianjin(ranked 3rd of 21 universities) 2016