Lu He

Contact Information	Donald Bren Hall 6136 Department of Informatics University of California, Irvine Irvine, CA 92697	949-572-7351 lhe11@uci.edu www.luheholly.com

Research Interests Natural language processing, human-computer interaction, machine learning, health informatics, social network analysis, social media mining

Education

University of California, Irvine, Irvine, CA

Ph.D., Informatics, 2017.9-present

University of Minnesota, Minneapolis, MN

B.S. with distinction, Computer Science, 2013.9-2017.5

Experience

Graduate Research Assistant Sept 2017 to Present
Department of Informatics, University of California, Irvine
Supervisor: Kai Zheng, Ph.D.
Project: Evaluate and improve current computational tools to analyze healthcare related social media data.

Bioinformatics Programmer June 2018 to Sept 2018
Bakar Computational Health Sciences Institute
Supervisor: Gundolf Schenk, Ph.D.
Project: Improved the performance of a de-identification tool for detecting and replacing Protected Health Information in 60 million clinical notes.

Undergraduate Research Assistant Sept 2016 to May 2017
Institute for Health Informatics, UMN
Supervisor: Chih-Lin Chi, Ph.D
Project: Developed decision tree models for personalized warfarin treatments.

Undergraduate Research Assistant Sept 2016 to May 2017
Department of Computer Science, UMN
Supervisor: Svetlana Yarosh, Ph.D.
Project: Performed sentiment analysis on journals from an online health community.

Undergraduate Research Assistant June 2016 to Sept 2016
Institute for Health Informatics, UMN
Supervisor: Rui Zhang, Ph.D.
Project: Developed rule-based and machine learning models to extract supplement use status in clinical notes.

Undergraduate Fellow June 2016 to Aug 2016
Minnesota Population Center
Supervisors: Kevin Horne and Jayandra Pokharel
Project: Converted Integrated Public Use Microdata Series (IPUMS) from MySQL to PostgreSQL.

Accepted papers

1. **He L**, Zheng K. How do general-purpose sentiment analyzers perform when applied to health-related online social media data? In: Proceedings of the 2019 World Congress on Health and Biomedical Informatics (MEDINFO 19). 2019. (forthcoming)
2. Shehada ER, **He L**, Eikey EV, Jen M, Wong A, Young S, Zheng K. Characterizing frequent flyers of an emergency department using cluster analysis. In: Proceedings of the 2019 World Congress on Health and Biomedical Informatics (MEDINFO 19). 2019. (forthcoming)
3. Y. Fan, **L. He**, S. Pakhomov, G. Melton, R. Zhang. Classifying Supplement Use Status in Clinical Notes. 2017 American Medical Informatics Association Joint Summits (AMIA). **CRI Student Paper Competition 2nd Place** PubMed
4. C. Chi, **L. He**, K. Ravvaz, J. Weissert, P. Tonellato. Optimized Decision Support Rules of Precision Warfarin Treatment. Pacific Symposium on Biocomputing 2018. PubMed
5. H. Ma, C. E. Smith, **L. He**, S. Narayanan, R. A. Giaquinto, R. Evans, L. Hanson, and S. Yarosh. Write for Life: Persisting in Online Health Communities through Expressive Writing and Social Support. In Proc. of Computer-Supported Cooperative Work (CSCW) 2018 Online First. ACM

Teaching

Graduate Teaching Assistant Sept 2018 to present
IN4MTX 151 - Project Management
Department of Informatics
University of California, Irvine

Undergraduate Teaching Assistant Sept 2016 to May 2017
CSci 1913 - Introduction to Algorithms and Data Structures
Department of Computer Science
University of Minnesota

Scholarship and Awards

- CRA-W Grad Cohort Workshop April 2018
  Computing Research Association
- Graduate Dean Recruitment Fellowship Sept 2017
  University of California, Irvine
- Dean's Award Sept 2017
  University of California, Irvine

- Maroon Global Excellence Scholarship — Sept 2013 to May 2017
  University of Minnesota

Technical Skills

- Programming Languages: Python, C/C++, Java, Matlab, R, Clojure, Javascript, SQL
- Data Analysis: Sentiment analysis, topic modeling, survival analysis, cluster analysis, social network analysis
- Libraries and Frameworks: SciPy, SpaCy, NLTK, gensim, NumPy, Pandas, scikit-learn
- Tools: Git, AWS, Jupyter

Serives

- Reviewer: AMIA 2018-2019

Talks and Presentations

- "Characterizing Frequent Users of Emergency Department Using Cluster Analysis", Medical Intelligence and Innovation Institute (MI3), Childrens Hospital of Orange County (CHOC), Orange, CA, April 8, 2019