

Steven R. Wilson

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CURRENT POSITION	Oakland University , Rochester, Michigan Assistant Professor, Computer Science & Engineering	Aug 2021 – Present
EDUCATION	University of Michigan , Ann Arbor, Michigan Ph.D., Computer Science & Engineering • Thesis Title: Natural Language Processing for Personal Values and Human Activities • Advisor: Rada Mihalcea M.S., Computer Science & Engineering Taylor University , Upland, Indiana B.S., Computer Science/Systems • Summa cum laude • Minor in psychology • Concentration in Intelligent Systems	Jan 2019 Apr 2015 May 2013
RESEARCH EXPERIENCE	OaklandNLP Lab , Oakland University Lab Director • Research areas: Natural language processing, Computational Social Science Institute for Language, Cognition, and Computation , University of Edinburgh Postdoctoral Research Associate, SMASH Lab • Supervisor: Walid Magdy • Research areas: Natural language processing, Computational Social Science Artificial Intelligence Lab , University of Michigan Postdoctoral Research Fellow, LIT Lab • Supervisor: Rada Mihalcea • Research areas: Natural language processing, Computational Social Science Graduate Student Research Assistant, LIT Lab • Supervisor: Rada Mihalcea • Research areas: Natural language processing, Computational Social Science Automated Imagery Analysis Group , SPAWAR Systems Center Pacific Research Intern • Project: Automated detection of oil spills from Synthetic Aperture Radar imagery • Supervisor: Bryan Bagnall • Research areas: Computer Vision, Machine Learning Advanced Concepts Lab , Lockheed-Martin Advanced Technology Labs College Student Technical Specialist • Project: Proprietary research • Supervisor: Ricardo Correa • Research areas: Cybersecurity, Mobile Devices, Malware Taylor University Research , Taylor University Research Intern, Department of Computer Science & Engineering • Project: Proprietary research for Lockheed-Martin • Supervisors: Stefan Brandle, Arthur White • Research areas: Cybersecurity, Operating Systems	Aug 2021 – Present Sep 2019 – Jul 2021 Feb 2019 – Jul 2019 Jan 2014 – Jan 2019 Jun 2013 – Aug 2013 Jun 2012 – Aug 2012 May 2011 – Jan 2012
PUBLICATIONS	PEER-REVIEWED 22) Bahgat, M., <u>Wilson, S. R.</u> , & Magdy, W. LIWC-UD: Classifying Online Slang Terms into LIWC Categories. <i>In Proceedings of the ACM Web Science Conference</i> . Barcelona, Spain, Jun 2022 21) Oprea, S., <u>Wilson, S. R.</u> , & Magdy, W. Should a Chatbot be Sarcastic? Understanding User Preferences Towards Sarcasm Generation. <i>Empirical Methods in Natural Language processing (EMNLP) - Demonstration Track</i> . <i>In Proceedings of the Annual Meeting of the Association of Computational Linguistics</i> Dublin, Ireland, May 2022 20) Oprea, S., <u>Wilson, S. R.</u> , & Magdy, W. Chandler: An Explainable Sarcastic Response Generator. <i>Empirical Methods in Natural Language processing (EMNLP) - Demonstration Track</i> . Punta Cana, Dominican Republic, Nov 2021	

- 19) Meaney, J. A., Wilson, S. R., Chiruzzo, L., Lopez, A., & Magdy, W. SemEval-2021 Task 7: HaHackathon, Detecting and Rating Humor and Offense. *International Workshop on Semantic Evaluation at ACL-IJCNLP*. Virtual, Aug 2021
- 18) Elsafoury, F., Katsigiannis, S., Wilson, S. R., & Ramzan, N. Does BERT pay attention to cyberbullying? In *Proceedings of the International ACM SIGIR Conference on Research and Development in Information Retrieval*. Virtual, Jul 2021
- 17) Hennig, F. & Wilson, S. R.. Diachronic Embeddings for People in the News. *Workshop on NLP and Computational Social Science at EMNLP*. Virtual, Nov 2020.
- 16) Li, J.,* Longinos, G.,* Wilson, S. R., & Magdy, W. Emoji and Self-Identity in Twitter Bios. *Workshop on NLP and Computational Social Science at EMNLP*. Virtual, Nov 2020.
- 15) Wilson, S. R., Magdy, W., McGillivray, B., & Tyson, G. Embedding Structured Dictionary Definitions. *Workshop on Insights from Negative Results in NLP at EMNLP*. Virtual, Nov 2020.
- 14) Wilson, S. R., Magdy, W., McGillivray, B., & Tyson, G. Analyzing Temporal Relationships between Trending Terms on Twitter and Urban Dictionary Activity. In *Proceedings of the Web Science Conference*. Virtual, Jul 2020.
- 13) Bahgat, M., Wilson, S. R., & Magdy, W. Towards Using Word Embedding Vector Space for Better Cohort Analysis. In *Proceedings of the International Conference on Web and Social Media*. Virtual, Jun 2020.
- 12) Wilson, S. R., Magdy, W., McGillivray, B., Garimella, K., & Tyson, G. Urban Dictionary Embeddings for Slang NLP Applications. In *Proceedings of the Language Resources and Evaluation Conference*. Virtual, May 2020.
- 11) Rechkemmer, A., Wilson, S. R., & Mihalcea, R. Small Town or Metropolis? Analyzing the Relationship between Population Size and Language. In *Proceedings of the Language Resources and Evaluation Conference*. Virtual, May 2020.
- 10) Shen, Y.,* Wilson, S. R.,* & Mihalcea, R. Measuring Personal Values in Cross-Cultural User-Generated Content. In *Proceedings of the International Conference on Social Informatics*. Doha, Qatar, Nov 2019.
- 9) Wilson, S. R., & Mihalcea, R. Predicting Human Activities from User-Generated Content. In *Proceedings of the Annual Meeting of the Association of Computational Linguistics*. Florence, Italy, Jul 2019.
- 8) Zhang, L., Wilson, S. R., & Mihalcea, R. Multi-Label Transfer Learning for Multi-Relational Semantic Similarity. In *Proceedings of the Eighth Joint Conference on Lexical and Computational Semantics*. Minneapolis, USA, Jun 2019.
- 7) Wilson, S. R., Shen, Y., & Mihalcea, R. Building and Validating Hierarchical Lexicons with a Case Study on Personal Values.[†] In *Proceedings of the International Conference on Social Informatics*. St. Petersburg, Russia, Sep 2018.
- 6) Li, Y., Mihalcea, R., and Wilson, S. R.. Text-based Detection and Understanding of Changes in Mental Health. In *Proceedings of the International Conference on Social Informatics*. St. Petersburg, Russia, Sep 2018.
- 5) Wilson, S. R., & Mihalcea, R. Measuring Semantic Relations between Human Activities. In *Proceedings of the International Joint Conference on Natural Language Processing*. Taipei, Taiwan, Nov 2017.
- 4) Wilson, S. R., Mihalcea, R., Boyd, R.L., & Pennebaker, J. W. Disentangling Topic Models: A Cross-cultural Analysis of Personal Values through Words. In *the Workshop on Natural Language Processing and Computational Social Science at EMNLP*. Austin, TX, Nov 2016.
- 3) Ruan, X., Wilson, S. R., & Mihalcea, R. Finding Optimistic and Pessimistic Users on Twitter. In *Proceedings of the Annual Meeting of the Association of Computational Linguistics*. Berlin, Germany, Aug 2016.

* Equal Contributions

[†] Best Paper Award

- 2) Wilson, S. R., Mihalcea, R., Boyd, R.L., & Pennebaker, J. W. Cultural Influences on the Measurement of Personal Values through Words. *In Proceedings of the 2016 AAAI Spring Symposium Series*. Stanford, CA, Mar 2016.
- 1) Boyd, R. L.,* Wilson, S. R.,* Pennebaker, J. W., Kosinski, M., Stillwell, D., & Mihalcea, R. Values in Words: Using Language to Evaluate and Understand Personal Values. *In Proceedings of the Ninth AAAI International Conference on Web and Social Media*, Oxford, UK, May 2015.

E-PRINT/OTHER

- 5) Burdick, L., Wang, M., Ignat, O., Wilson, S. R., Zhang, Y., Wei, Y., Mihalcea, R., and Deng, J. Building a Flexible Knowledge Graph to Capture Real-World Events. *Text Analysis Conference*. Nov 2019.
- 4) Burdick, L., Wilson, S. R., Ignat, O., Welch, C., Zhang, L., Wang, M., Deng, J., and Mihalcea, R. Entity and Event Extraction from Scratch Using Minimal Training Data. *Text Analysis Conference*. Nov 2018.
- 3) Zhang, L., Wilson, S. R., and Mihalcea, R. Sequential Network Transfer: Adapting Sentence Embeddings to Human Activities and Beyond. *arXiv:1804.07835 [cs.CL]*. Apr 2018.
- 2) Pappas, K., Wilson, S. R., and Mihalcea, R. Stateology: State-Level Interactive Charting of Language, Feelings, and Values. *arXiv:1612.06685 [cs.CL]*. Dec 2016.
- 1) Radev, D., Zhang, R., Wilson, S. R., Van Assche, D., Gubert, H. S., Krivokapic, A., Dong, M., Wu, C., Bondera, S., Brandl, L., and Dohnmann, J. Cruficorn: Solving Crosswords with Natural Language Processing. *arXiv:1611.02360 [cs.CL]*. Nov 2016.

ACADEMIC HONORS & AWARDS

Faculty Research Fellowship Oakland University, University Research Committee	2022
Michigan Artificial Intelligence Lab Symposium “Greatest Societal Impact” Awarded for poster presentation: “Clustering Human Activity Expressions”	2018
Best Paper Award International Conference on Social Informatics Awarded for the paper: “Building and Validating Hierarchical Lexicons with a Case Study on Personal Values”	2018
Rackham Graduate School Conference Travel Grant University of Michigan, Ann Arbor, MI Provides monetary allowance for academic conference travel. Awarded Yearly.	2015 – 2018
Michigan Institute for Data Science Annual Symposium “Most Likely Societal Impact” Awarded for poster presentation: “Disentangling Topic Models: A Cross-cultural Analysis of Personal Values through Words”	2016
Outstanding Computer Science Graduate Taylor University, Upland, IN Awarded to one student each year, selected by the faculty of Computer Science & Engineering.	2013
President Scholarship, Taylor University, Upland, IN Highest tier of merit based academic scholarship awarded by the university.	2009 – 2013
AP Scholar with Distinction The College Board For receiving an average score of at least 3.5 on all Advanced Placement exams taken, and scores of 3 or higher on five or more of these exams.	2009

PROFESSIONAL ACTIVITIES

SERVICE	
Co-organizer Workshop on NLP for Positive Impact at EMNLP	2022

* Equal Contributions

Co-organizer/Co-founder Mar 2020 – Jul 2021
University of Edinburgh Computational Social Science Reading Group

Organizer Sep 2015 – Jul 2019
University of Michigan Natural Language Processing Reading Group

Program Committee Member / Reviewer – Conferences & Workshops

SemEval 2022 (Task overview papers), SRW @ ACL 2022, SemEval 2022 (Task 6 systems), NEATCLasS @ ICWSM 2022, UserNLP @ TheWebConf 2022, LREC 2022, ARR Jan 2022, ARR Nov 2021, ARR Oct 2021, EMNLP 2021, CIKM 2021, GeBNLP @ ACL-IJCNLP 2021, SemEval 2022 (task proposals), SocialNLP @ NAACL 2021, SocialNLP @ TheWebConf 2021, SemEval 2021 (Task 7 systems), ACL/IJCNLP 2021, CSCW 2021, SRW @ NAACL 2021, NAACL 2021, EACL 2021, AAAI 2021, NLP+CSS @ EMNLP 2020, CoNLL 2020, EMNLP 2020, W-NUT @ EMNLP 2020, GeBNLP @ COLING 2020, LREC 2020, AAAI 2020, CoNLL 2019, IJCNLP-EMNLP 2019, SocialNLP @ IJCAI 2019, ACL 2019, NLP+CSS @ NAACL 2019, NAACL 2019, AAAI 2019, EMNLP 2018, LREC 2018, EMNLP 2017, NLP+CSS @ ACL 2017, COLING 2016, WWW 2016, EMNLP 2015

Invited Reviewer – Journals

Online Social Networks and Media 2020/2021, Frontiers in AI 2020, Information 2020, Applied Sciences 2019, Computer Speech and Language 2017, Psychological Methods 2017, Journal of the Association for Information Science and Technology 2017

Volunteering

Virtual conference volunteer at ACL 2020, Post-acceptance mentor for ACL Student Research Workshop 2020, Instructor at CS Kickstart 2017, Student Volunteer at EMNLP 2016, Session Facilitator at Girls Encoded 2016, Volunteer at Girls Encoded 2015, Session Facilitator at Xplore Engineering 2014 & 2015

Secondary Reviewer

CIKM 2020, ACM Hypertext 2020, JAIR 2016

MEMBERSHIPS

The Association for Computational Linguistics 2015 – Present

The Association for the Advancement of Artificial Intelligence 2015 – 2018

CONFERENCES ATTENDED

Main Conferences

NAACL 2021, EMNLP 2020, WebSci 2020, ACL 2020, SocInfo 2019, ACL 2019, *SEM 2019, NAACL 2019, SocInfo 2018, IC2S2 2018, IJCNLP 2017, EMNLP 2016, IC2S2 2016, MSLD 2016, ICWSM 2015, ICWSM 2014

Workshops

NLP+CSS @ EMNLP 2020, INSIGHTS @ EMNLP 2020, EurNLP 2019, NLP+CSS @ NAACL 2019, Midwest Speech and Language Days (MSLD) 2019, MSLD 2018, MSLD 2017, SocialNLP @ EMNLP2016, NLP+CSS @ EMNLP2016, AAAI Spring Symposium: OSSM 2016, Workshop on Standards and Practices in Large-Scale Social Media Research @ ICWSM 2015, MSLD 2015

Summer/Winter Schools

2nd HUMAINT Winter School on Fairness, Accountability, and Transparency in AI 2020, École Polytechnique and DATAIA Institute Data Science Summer School 2019

TEACHING

School of Engineering and Computer Science, Oakland University

Instructor Fall 2021, Winter 2022
CSI 3450: Database Design and Implementation

School of Informatics, University of Edinburgh

University Teacher (Instructor) Fall 2020 – Winter 2021
INFR11145: Text Technologies for Data Science

Guest Lecturer Nov 2019
INFR11145: Text Technologies for Data Science, *Lecture title: "Comparing Text Corpora"*

Data Science Summer School, École Polytechnique and DATAIA Institute

Tutorial Organizer Jun 2019
Fundamentals of Text Analysis for User Generated Content

Department of Electrical Engineering and Computer Science, University of Michigan
 Guest Lecturer Winters, 2017 – 2019
 EECS 486: Information Retrieval, *Lecture title: “Topic Modeling”*
 Graduate Student Instructor Fall 2017
 EECS 595: Natural Language Processing
 Graduate Student Instructor Fall 2013
 EECS 280: Programming and Introductory Data Structures

The Center for Research in Teaching and Learning, University of Michigan
 Practice Teaching Facilitator Winter 2016 – Fall 2017
 Engineering Teaching Consultant Fall 2015 – Winter 2017
 Graduate Student Instructor Training - Workshop Facilitator Fall 2015 – Winter 2017

Department of Computer Science & Engineering, Taylor University
 Laboratory Assistant Spring 2012
 COS 121: Foundations of Computer Science II

STUDENT ADVISING

Achyut Ganti, Ph.D., Oakland University Jan 2022 – Present
 Condecending and patronizing language detection

Seth Jones, M.S., Ph.D., Oakland University Sep 2021 – Present
 Software infrastructure for data processing

Guillem Ramírez, M.Sc. '21, University of Edinburgh Mar 2021 – Aug 2021
 Semantic representation for armed conflict event descriptions

Luna Yang, M.Sc. '21, University of Edinburgh Mar 2021 – Aug 2021
 Visual Misinformation on Social Media during the COVID-19 Pandemic

Charalambos Ioannou, M.Sc. '21, University of Edinburgh Mar 2021 – Aug 2021
 Visual Misinformation on Social Media during the COVID-19 Pandemic

Yue Pan, M.Sc. '21, University of Edinburgh Mar 2021 – Aug 2021
 Cross-lingual Analysis of COVID-19 Rumor Sharing on Social Media

Chenxin Diao, B.Sc. '21, University of Edinburgh Apr 2020 – Jul 2021
 Rumor Verification on Social Media

Tia Deviyani, B.Sc. '21, University of Edinburgh Jul 2020 – Dec 2020
 Semantic Word Categorization for English Slang

Felix Hennig, M.Sc. '20, University of Edinburgh Mar 2020 – Sep 2020
 Discovering Temporal Trends in Entity Representations from News Text

Faisal Alothman, M.Sc. '20, University of Edinburgh Mar 2020 – Sep 2020
 Assessing Social Situations with NLP models

Jinhang Li, M.Sc. '20, University of Edinburgh Mar 2020 – Sep 2020
 Analyzing the Relationship between Emoji Use and Self-Identity on Twitter

Giorgos Longinos, M.Sc. '20, University of Edinburgh Mar 2020 – Sep 2020
 Analyzing the Relationship between Emoji Use and Self-Identity on Twitter

Yiting Shen, B.S.E. '18, M.S. '19, University of Michigan May 2017 – May 2019
 Evaluation and Weighting of a Lexicon for Personal Values

Amy Rechkemmer, B.S.E. '18, University of Michigan Dec 2017 – May 2019
 Content Analysis of Urban and Rural Twitter Users

Li Zhang, B.S.E. '18, University of Michigan Sep 2017 – Dec 2018
 Language Understanding and Semantic Similarity of Short Texts

Anamaria Cuza, B.S.E. '21, University of Michigan Dec 2017 – Dec 2018
 Exploration of Bias in NLP Data Annotation

Zheng Wu, M.S. '17, University of Michigan Jan 2016 – May 2017
 Comparison of Topic Modeling Methods

Renhan Zhang, M.S. '16, University of Michigan Jun 2015 – Jan 2016
 A System for the Collection of Psycholinguistic Social Media Data

PRESENTATIONS TALKS

Istanbul Twitter Developers Community “Preprocessing Social Media Text”	Apr 2022
NLP+CSS 201 Tutorials “Preprocessing Social Media Text”	Mar 2022
Social Data Science Interest Group The Alan Turing Institute, London, UK “The Semantic Space of Human Activities”	Oct 2019
Information Retrieval Seminar University of Glasgow, Glasgow, UK “The Semantic Space of Human Activities”	Oct 2019
#UMTweetCon2019 Institute for Social Research , University of Michigan, Ann Arbor, MI “Predicting Human Activities from User-Generated Content”	May 2019
Artificial Intelligence Lab Honors Competition University of Michigan, Ann Arbor, MI “Measuring Semantic Relations between Human Activities”	Oct 2017
International Conference on Computational Social Science Northwestern University, Evanston, IL “Cultural Influences on the Measurement of Psychological Phenomena: Value-behavior Relationships in India and the United States”	Jun 2016
Midwest Speech and Language Days University of Indiana, Bloomington “Cultural Influences on the Measurement of Personal Values through Words”	May 2016
Artificial Intelligence Lab Mini-Symposium University of Michigan, Ann Arbor, MI “Values in Words: Using Language to Evaluate and Understand Personal Values”	May 2015
Midwest Speech and Language Days Toyota Institute of Technology, Chicago, IL “Values in Words: Using Language to Evaluate and Understand Personal Values”	May 2015
Michigan College of Engineering “Recruit at Home” Event College of Natural & Applied Science, Taylor University, Upland, IN “Navigating Graduate School” Sponsored by the University of Michigan College of Engineering	Oct 2014

POSTERS

Midwest Speech and Language Days Toyota Institute of Technology, Chicago, IL “Clustering and Predicting Human Activities”	May 2019
University of Michigan Artificial Intelligence Lab Symposium University of Michigan, Ann Arbor, MI “Clustering Human Activity Expressions”	Nov 2018
International Conference on Computational Social Science Northwestern University, Evanston, IL “Relating Human Activities with Phrasal Embeddings”	Jul 2018
International Conference on Computational Social Science Northwestern University, Evanston, IL “Crowd-Powered Concept Sorting for Lexicon Creation”	Jul 2018

Midwest Speech and Language Days	May 2017
Toyota Institute of Technology, Chicago, IL	
“Measuring Semantic Relations between Human Activities”	
University of Michigan Data Science Symposium	Nov 2016
University of Michigan, Ann Arbor, MI	
“Disentangling Topic Models: A Cross-cultural Analysis of Personal Values through Words”	
Society for Personality and Social Psychology	Feb 2015
Long Beach, CA	
“Language and values: Understanding human values with language and language categories.”	

SYSTEMS	Language and Information Technology research group , University of Michigan
ADMINISTRATION	Systems Administrator for LIT Lab Network Software Skills: <i>Ubuntu, NIS, Apache, MySQL</i>
	Jun 2014 – Nov 2018

REFERENCES	Available Upon Request
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[CV Compiled on 2022-04-11]