### Yudong Liu

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RESEARCH Interests Statistical Natural Language Processing, AI Fairness Education, Applications of Eye-tracking

EDUCATION

Simon Fraser University, BC, Canada

Ph.D., Computer Science, 2009

Jilin University, Jilin, China M.S., Computer Science, 2002

Jilin University, Jilin, China B.S., Computer Science, 1999

EMPLOYMENT

Western Washington University, Computer Science Department, Bellingham, WA, USA

ProfessorSeptember, 2023 -Associate ProfessorSeptember, 2018 - August, 2023Assistant ProfessorSeptember, 2013 - August, 2018InstructorSeptember, 2010 - August, 2013

Contextual Search, BC, Canada Consultant

April - August 2010

May - August, 2007

SAP Canada Localization Engineer

November, 2007 - December, 2008

Simon Fraser University, School of Computing Science, BC, Canada

Sessional Instructor

Axonwave Software Inc., Canada Internship

September - December, 2004

TEACHING

- Classes taught during my appointment of Full Prof. (Fall 2023 ): CSCI 301 (Formal Languages & Functional Programming) CSCI 510 (Formal Languages and Automata)
- Classes taught during my appointment of Associate Prof. (Fall 2018 Spring 2023)

CSCI 301 (Formal Languages & Functional Programming)

CSCI 305 (Analysis of Algorithms I)

CSCI 404 (Natural Language Processing)

CSCI 400 (Directed Independent Study for Undergrads)

CSCI 496 (Undergrad Research)

CSCI 573 (Computational Linguistics)

CSCI 590/591 (Grad Seminar I/II)

CSCI 692 (Research Experience)

- Classes taught during my appointment of Assistant Prof. (Fall 2013 Spring 2018):
  - CSCI 145 (Computer Programming & Linear Data Structures)

CSCI 305 (Analysis of Algorithms I)

CSCI 345 (Object Oriented Design)

CSCI 400 (Directed Independent Study for Undergrads)

CSCI 404 (Natural Language Processing)

- CSCI 496 (Undergrad Research)
- CSCI 500 (Directed Independent Study for Grad Students)
- CSCI 573 (Computational Linguistics)
- Classes taught during my appointment of Instructor:
  - CSCI 145 (Computer Programming & Linear Data Structures)
  - CSCI 211 (Discrete Structures & Functional Programming)
  - CSCI 227 (Computer Organization I)
  - CSCI 241 (Data Structures)
  - CSCI 347 (Computer Organization II)
  - CSCI 401 (Automata & Formal Language Theory)
  - CSCI 402 (Artificial Intelligence)
  - CSCI 410 (Programming Languages)
  - CSCI 510 (Automata & Formal Language Theory)
  - CSCI 512 (Computer Programming Languages)
  - CSCI 570 (Artificial Intelligence)

#### Research

### Refereed Conference Publications

- 1. Y. Elglaly, Y. Liu, Promoting Machine Learning Fairness Education through Active Learning and Reflective Practices. ACM SIGCSE Bulletin, Volume 55, Issue 3, July 2023, pp 4-6. https://doi.org/10.1145/3610585.3610589.
- 2. S. Dobesh<sup>1</sup>, T. Miller<sup>2</sup>, P. Newman<sup>2</sup>, **Y. Liu**, Y. Elglaly<sup>3</sup>, *Towards Machine Learning Fairness Education in a Natural Language Processing Course*. Proceedings of the 54th ACM Technical Symposium on Computer Science Education (SIGCSE TS 2023).
- 3. G. Wang<sup>1</sup>, Y. Liu, J. Hearne<sup>3</sup>, Few-shot Learning for Sumerian Named Entity Recognition. Proceedings of the Third Workshop on Deep Learning for Low-Resource Natural Language Processing (DeepLo) @ NAACL 2022 (2022 Annual Conference of the North American Chapter of the Association for Computational Linguistics), page 136-145. July 2022, Seattle, WA, USA.
- 4. P. Newman<sup>2</sup>, **Y. Liu**, Generating Descriptive and Rules-Adhering Spells for Dungeons & Dragons Fifth Edition. Proceedings of the 9th Games and Natural Language Processing Workshop @ LREC 2022 (13th Edition of Language Resources and Evaluation Conference), page 54-60. The European Language Resources Association. June 2022, Marseille, France.
- 5. A. Tseng<sup>2</sup>, S. Jung<sup>2</sup>, Y. Elglaly<sup>3</sup>, **Y. Liu**, S. Ludi<sup>4</sup>, *Exploration on Integrating Accessibility into an AI course*. Proceedings of the 53rd ACM Technical Symposium on Computer Science Education (SIGCSE TS 2022), page 864-870. March 2 5, 2022, Providence, RI, USA.
- Y. Liu, Y. Jiang<sup>1</sup>, J. Devenere<sup>2</sup>, Using Deep Learning for Fusion of Eye and Mouse Movement based User Authentication. The 2020 IEEE International Joint Conference on Biometrics (IJCB 2020), page 1-10, doi: 10.1109/IJCB48548.2020.9304926. Sept 28 Oct 1, 2020, Houston, TX, USA.
- J. Hearne<sup>3</sup>, A. Connor<sup>1</sup>, Y. Liu, D. Dixon<sup>2</sup>, D. F. Ritchie<sup>2</sup>. Dating Tablets in the Garshana Corpus. Proceedings of the Thirtieth International Florida Artificial Intelligence Research Society Conference (Short Paper). May 22-24, 2017. Marco Island, Florida, USA. AAAI Press, 2017.
- 8. J. Rose<sup>1</sup>, Y. Liu, A. Ahmed<sup>4</sup>. Biometric Authentication using Mouse and Eye Movement Data. 2nd International Workshop on Bio-inspired Security, Trust, Assurance and Resilience

<sup>&</sup>lt;sup>1</sup>WWU Grad Student

<sup>&</sup>lt;sup>2</sup>WWU Undergrad Student

<sup>&</sup>lt;sup>3</sup>WWU Internal Collaborator

 $<sup>^4</sup>$ External Collaborator

- (BioSTAR 2017) co-located with 38th IEEE Symposium on Security and Privacy (IEEE S&P 2017). May 25, 2017. San Jose, CA, USA.
- 9. H. Lu<sup>1</sup>, J. Rose<sup>1</sup>, **Y. Liu**, A. Ahmed<sup>4</sup>, L. Hou<sup>2</sup>. Combining Mouse and Eye Movement Biometrics for User Authentication. International Workshop on Information Security, Assurance, and Trust (I-SAT 2016). June 9-11, 2016, Vancouver, Canada.
- Y. Liu, J. Hearne<sup>3</sup>, B. Conrad<sup>1</sup>. Recognizing Proper Names in UR III Texts through Supervised Learning. Proceedings of the Twenty-nineth International Florida Artificial Intelligence Research Society Conference. May 16-18, 2016, Key Largo, Florida, USA. AAAI Press, 2016.
- Y. Liu, C. Burkhart<sup>2</sup>, J. Hearne<sup>3</sup> and L. Luo<sup>1</sup>. Enhancing Sumerian Lemmatization by Unsupervised Named-Entity Recognition. The 2015 Conference of the North American Chapter of the Association for Computational Linguistics – Human Language Technologies (NAACL-HLT 2015), May 31-June 5, 2015, Denver, Colorado, USA.
- L. Luo<sup>1</sup>, Y. Liu, J. Hearne<sup>3</sup>, and C. Burkhart<sup>2</sup>. Unsupervised Sumerian Personal Name Recognition. Proceedings of the Twenty-eighth International Florida Artificial Intelligence Research Society Conference, May 18-20, 2015, Hollywood, Florida, USA. AAAI Press, 2015.
- 13. Y. Li<sup>4</sup>, Y. Liu, H. Zhang<sup>4</sup>. Cross-Boundary Enterprise Security Monitoring. International Conference on Computational Problem-solving (ICCP), October 20-22, 2012, Chengdu and Leshan, China.
- 14. Y. Li<sup>4</sup>, Y. Shen<sup>4</sup>, Y. Liu. *Utilizing Content Delivery Network in Cloud Computing*. International Conference on Computational Problem-solving (ICCP), October 20-22, 2012, Chengdu and Leshan, China.
- 15. Y. Liu, A. Sarkar. Exploration of LTAG-spinal Formalism and its Treebank for Semantic Role Labeling. Workshop on Grammar Engineering Across Framework, Singapore, August 2-6, 2009
- 16. Y. Liu, A. Sarkar. Experimental Evaluation of LTAG-Based Features for Semantic Role Labeling. Joint Meeting of the Conference on Empirical Methods on Natural Language Processing (EMNLP) and the Conference on Natural Language Learning (CoNLL), Prague, Czech, June 23-30, 2007.
- Y. Liu, Z. Shi, and A. Sarkar. Exploiting Rich Syntactic Information for Relation Extraction from Biomedical Articles. Human Language Technologies: The 8th Annual Conference of the North American Chapter of the Association for Computational Linguistics, Rochester, U.S.A, April 22-27, 2007.
- Z. Shi, G. Melli, Y. Wang, Y. Liu, B. Gu, M. Kashani, A. Sarkar and F. Popowich. Answering Summarization of Multiple Biomedical Documents. Canadian AI 2007, Montreal, Quebec. May 28-30, 2007.
- Y. Liu, A. Sarkar. Using LTAG-based Features for Semantic Role Labeling. The 8th International Workshop on Tree Adjoining Grammar and Related Formalisms, Sydney, Australia, July 15-18, 2006
- G. Melli, Z. Shi, Y. Wang, Y. Liu, A. Sarkar and F. Popowich. Description of SQUASH, the SFU Question Answering Summary Handler for the DUC-2006 Summarization Task, Document Understanding Conference, New York City, NY, June 8-9, 2006
- G. Melli, Y. Wang, Y. Liu, M. Kashani, Z. Shi, A. Sarkar and F. Popowich. Description of SQUASH, the SFU Question Answering Summary Handler for the DUC-2005 Summarization Task, DUC-2005, Vancouver, B.C., October 2005

#### Refereed Journal Publications

1. J. Rose<sup>1</sup>, **Y. Liu**, A. Ahmed<sup>4</sup>. *Biometric Authentication using Mouse and Eye Movement Data*. Journal of Cyber Security and Mobility, pp. 1-16. River Publishers. Vol 6 Issue 1, January 2017.

#### BOOK CHAPTERS

- 1. Y. Liu, J. Hearne<sup>3</sup>, Towards Archival Reconstruction of Ur III Cuneiform Tablets. in Ur in the Twenty-First Century CE. Proceedings of the 62nd Rencontre Assyriologique Internationale at Philadelphia, July 11–15, 2016. Chapter 20. pp. 309-314. Grant Frame, Joshua Jeffers, Holly Pittman (Editors). Publisher: Eisenbrauns. 2021 Feb 3. ISBN-13: 978-1646021062. ISBN-10: 1646021061.
- Y. Liu Natural Language Processing in Data Analytics. in Data Analytics and AI (1st ed.). Chapter 7. pp. 117-132. Liebowitz, J. (Editor), Auerbach Publications, Aug. 2020. https://doi.org/10.1201/9781003019855. ISBN-13: 978-0367522001. ISBN-10: 0367522004.
- 3. A. Ahmed<sup>4</sup>, Y. Liu. Cognitive Biometrics for User Authentication. in Biometric-Based Physical and Cybersecurity Systems. pp 387–399. Obaidat S. Mohammad, Issa Traore, Isaac Woungang (Editors). Springer International Publishing. Oct. 2018. Print ISBN: 978-3-319-98733-0. Electronic ISBN: 978-3-319-98734-7.
- 4. H. Lu<sup>1</sup>, J. Rose<sup>1</sup>, Y. Liu, A. Ahmed<sup>4</sup>, L. Hou<sup>2</sup>. Combining Mouse and Eye Movement Biometrics for User Authentication. in Information Security Practices Emerging Threats and Perspectives. pp.55-71. Issa Traore, Ahmed Awad, Isaac Woungang (Editors), Springer, Jan. 2017. Print ISBN: 978-3-319-48946-9. Online ISBN: 978-3-319-48947-6.
- 5. Y. Liu. Semiring Parsing, invited chapter in Fuzzy Semirings with Applications to Automata Theory. The book is part of the Studies in Fuzziness and Soft Computing book series (STUDFUZZ, volume 278). Javed Ahsan, John N. Mordeson, Muhammad Shabir (Editors), Springer-Verlag, 2012. Print ISBN:978-3-642-27640-8. Online ISBN: 978-3-642-27641-5.

#### Refereed Posters

- 1. B. Palonis, S. Bobesh, S. Bellscheidt, M. W. Mkaouer, Y. Liu, Y. Elglaly, Large-Scale Anonymized Text-based Disability Discourse Dataset. The 25th International ACM SIGAC-CESS Conference on Computers and Accessibility (ASSETS 2023), Oct 23-25, 2023, New York, NY
- 2. H. Guzman-Soto<sup>2</sup>, **Y. Liu**, Introducing an Open Source Library for Sumerian Text Analysis. The First Workshop on Ancient Language Processing (ALP), Sept 8, 2023. Co-located with Recent Advances in Natural Language Processing 2023 in Varna, Bulgaria.
- 3. Y. Liu Preliminary Experiments on Generating Sumerian Word Embeddings. The 33rd International Conference of the Florida Artificial Intelligence Research (FLAIRS 2020), Poster abstract.
- 4. Y. Liu, Y. Jiang<sup>1</sup>, J. Devenere<sup>2</sup> Using Stacked BDLSTMs for Fusion of Eye and Mouse Dynamics based User Authentication. The 14th Women in Machine Learning Workshop (WiML 2019). December 9th, 2019. Co-located with NeurIPS in Vancouver, BC, Canada.
- 5. S. Anderson<sup>2</sup>, Y. Liu. Functionality of the **Bei** Construction in Chinese: Comparing Long v.s. Short Passives in Emotional Polarity. The 18th Chinese Lexical Semantics Workshop (CLSW2017). May 18-20, 2017. Leshan, Sichuan, China.
- Y. Liu, C. Burkhart<sup>2</sup>, J. Rose<sup>1</sup>. Personal Name Recognition in Sumerian Texts Using a Signbased HMM. Proceedings of the Twenty-nineth International Florida Artificial Intelligence Research Society Conference. May 16-18, 2016, Key Largo, Florida, USA, 2016.

#### My Recent Talks and Presentations at Refereed Conferences/Venues

1. Few-shot Learning for Sumerian Named Entity Recognition, Deep-Lo NLP Workshop @ NAACL, July, 24, 2022.

- 2. Using Deep Learning for Fusion of Eye and Mouse Movement based User Authentication, IEEE International Joint Conference on Biometrics (IJCB), Oct 1, 2020.
- 3. Using Stacked BDLSTMs for Fusion of Eye and Mouse Dynamics based User Authentication. Women in Machine Learning (WiML) Workshop @ NeurIPS, Dec 9, 2019.
- 4. Dating Tablets in the Garshana Corpus. The Thirtieth International Florida Artificial Intelligence Research Society Conference (FLAIRS). May 22-24, 2017.
- 5. Recognizing Proper Names in UR III Texts through Supervised Learning. The Twenty-ninth International Florida Artificial Intelligence Research Society Conference. May 16-18, 2016.
- Proper Names Recognition and Dating Tablets of the Ur III Period. 62nd Rencontre Assyriologique Internationale (RAI): Ur in the Twenty-First Century, University of Pennsylvania, July 14, 2016. Co-presenter: James Hearne.
- 7. Unsupervised and Supervised Learning of Sumerian Proper Names Recognition a Two-stage Approach. The 4th Pacific Northwest Regional Natural Language Processing Workshop, Seattle, May 20, 2016.
- 8. Enhancing Sumerian Lemmatization by Unsupervised Named-Entity Recognition. The 2015 Conference of the North American Chapter of the Association for Computational Linguistics Human Language Technologies (NAACL-HLT 2015), Denver, Colorado, USA. May 31-June 5, 2015.
- 9. Latent SVMs for Semantic Role Labeling using LTAG Derivation Trees (Best Student Presentation Award). The Pacific Northwest Regional NLP Workshop (NW-NLP 2010), Microsoft Research, Redmond, WA, USA, April 23, 2010.

## Talks and Poster at non-Refereed Conferences/Venues (Either me or my students as presenters)

- 1. Generating Descriptive and Rules-Adhering Spells for Dungeons & Dragons Fifth Edition. The 9th Games and Natural Language Processing Workshop @ LREC 2022, June 25, 2022. Presenter: Pax Newman.
- 2. Visualizing Mouse Movement and Eye Movement in User Authentication Interface.
  - Grace Hopper Conference, 2016. Accepted into "ACM Student Research Competition". Oct 19-21, 2016, Houston, TX. Presenter: Leon Hou.
  - The Scholars Week All-University Poster Competition, May 19-20, 2016, WWU. Presenters: Leon Hou, Chloe Yugawa.
- 3. Combining Mouse and Eye Movement Biometrics for User Authentication. The 5th Annual Graduate Student Conference, May 21, 2016, WWU. "Outstanding Poster Presentation" Award. Presenter: Jamison Rose.
- 4. A Survey of Computational Linguistic Research at Western. Linguistics Program, WWU, 2016 Let's Talk Series, Feb 18, 2016. Presenter: James Hearne, Yudong Liu, and Brian Hutchinson.
- A Second-Language Learning Environment Aided by Eye-tracking. The Scholars Week All-University Poster Competition, May 14-15, 2015, WWU. Presenters: Ariel Cooper, Kyle Mc-Cormick.
- 6. Preliminary Study into Named Entities Recognition from Cuneiform Tablets.
  - The 3rd Pacific Northwest Regional Natural Language Processing Workshop, Microsoft Research, Redmond, WA. April 24, 2014. Presenters: C. Burkhart and B. Toner. Advisors: Yudong Liu and James Hearne.
  - the Scholars Week All-University Poster Competition. May 15-16, 2014, WWU. "Outstanding Poster" Award (Ratio 16/150). Presenters: C. Burkhart and Felicity Brewer.

#### STUDENTS SUPERVISION

Graduate Students (me as research advisor)

- Jordan Birnel: Cross-lingual Transfer Learning on the Complex Word Identification Task. Graduated in Fall 2022.
- Guanghai Wang: Few-shot Learning on Sumerian Named Entity Recognition. Graduated in Spring 2022.
- Yusheng Jiang: Eye-tracking for User Authentication using Deep Learning. Graduated in Summer 2019.
- Jamison Rose: Eye-tracking for User Authentication. Graduated in Spring 2016.
- Hongwei Lu: Eye-tracking for User Authentication. Graduated in Winter 2016.
- Bryan Connad: Information Extraction from Ur III Texts. Graduated in Summer 2015. \*Co-advisor: James Hearne.
- Liang Luo: Information Extraction from Ur III Texts. Graduated in Fall 2014. \*Co-advisor: James Hearne.

#### Graduate students and Undergraduate Students (working with me)

- Hansel Guzman-Soto (Spring 2022 current): An Information Extraction (IE) Framework for Sumerian Text.
- Pax Newman (Winter Spring 2022): Generating Descriptive and Rules-Adhering Spells for Dungeons & Dragons Fifth Edition.
- Sam Dobesh (\*grad student, Winter Summer 2022), Tyler Miller (Spring 2022 current), Pax Newman (Summer 2022): Towards Machine Learning Fairness Education in a Natural Language Processing Course. \*Co-advisor: Yasmine Elglaly.
- Christopher Drazic, Ivan Chuprinov (\*grad students, Spring 2021): Annotations of Facebook Comments for the CWI task.
- Henry II, Greg Lindman, Nicholas Uhlhorn, Simon Ellis, Elliot Fisk (CSCI 49X Senior Project Group, Winter Spring 2022): Social Network Analysis of Sumerian Text. \*Me participating in the project.
- Sam Jung (Spring 2021 Winter 2022), Ann Tseng (Spring 2021 Summer 2021): Exploration on Integrating Accessibility into an AI course. \*Co-advisor: Yasmine Elglaly
- Isaiah Pellerin (Fall 2021): SemEval 2022 shared task on Patronizing and Condescending Language Detection.
- Carson Vandegriffe, Will Rasmussen (Spring 2021, Fall 2021): Feature Analysis on Complex Word Identification.
- Sam Jung, Aaron Miller (Winter 2021): Making up a Text Classification Programming Assignment
- Hansel Guzman-Soto, Hannah Buzard (Fall 2020, Winter 2021): Complex Word Identification from Facebook Comments.
- Martin Smith, Ryan Taylor, Christopher Drazic (CSCI 49X Senior Project Group, Winter Fall 2020): CS Graduate Program Management System. \*Co-advisor: Filip Jagodzinski.
- Trevor Marcus (Fall 2019): Keyword Extraction from Facebook Comments.
- Rachel Edwards, Alexia Scriven Spring Summer 2017: Collocation Error Identification and Analysis of Chinese English learners.
- Sophie Anderson, Lai Yan Yung (Spring 2017): Chinese Sentiment Lexicon Construction and Classification.
- Michael Siderius, Rimika Majumdar (Spring 2017): Harassment Detection on Social Media.
- Connor Freitas (Winter-Spring 2017): Improving Chinese to English Machine Translated Messages through Automatic Post-Editing.
- Andy Brown et. al. (CSCI 49X Senior Project Group, Spring, 2016 Winter, 2017), Ian Fisk, Alexia Scriven (Spring 2016): Information Extraction from Garshana Corpus. \*Co-advisor: James Hearne
- Leon Hou, Chloe Yugawa (Fall 2015-Spring 2016): Biometic Authentication Using Mouse and Eue Dynamics.
- Ariel Cooper, Zachary Dunnewind, Kyle McCormick (CSCI 49X Senior Project Group, Winter

- Spring 2015): A Second-Language Learning Environment Aided by Eye-tracking.
- Felicity Brewer et. al. (CSCI 49X Senior Project Group, Winter-Spring 2014): Unsupervised Named Entity Recognition from Ur III texts. \*Co-advisor: James Hearne

# GRANT AND TEACHING PROPOSAL EFFORTS

- ACM SIGCSE Special Project Grants (the round of Nov 2021) on *Teaching Accessibility for Fairness in AI Courses*, \$4,740. First author (at submission and acceptance). Co-PI. Acceptance rate: 22% (4 out of 18).
- ACM SIGCSE Special Project Grants (the round of May 2021), \$5,000. CO-PI. Rejected.
- National Endowment Humanities (NEH) Digital Humanities Advancement Grants Level I, June 2017 (The Social Network and Physical Topography of an Early Complex State: the Ur III Kingdom through the Drehem Archives). Amount: \$40,001-\$75,000. PI. Rejected.
- Honors Program Proposal, Winter 2016 (Natural Language Processing for Social Media): Rejected.
- Grants-in-Aid, WWU, Spring, 2014 (Using Eye-tracking Data for Automatic Document Summarization): Rejected.
- Research and Creative Opportunities for Undergraduates, WWU (Connor Freitas. Advisor: Yudong Liu), Feb 2017 (*Improving Chinese to English Machine Translated Messages through Automatic Post-Editing*). Granted. Amount: \$400.

#### SERVICE

#### Professional Services

- Co-organizers, 1st Workshop of Ancient Language Processing at 13th RANLP Conference.
- Reviewer, SIGCSE TS 2021 (0+3), 2022 (3+4), 2023 (6+3).
- Reviewer, DSH (Digital Scholarship in the Humanities), 2022 (1).
- Program Committee, Reviewer, 17th Workshop on Innovative Use of NLP for Building Educational Applications (BEA Workshop @ NAACL) 2022 (2).
- Chair of Keynote Session, IEEE-COIN Conference. Aug. 23, 2021.
- Program Committee, Reviewer, IEEE-COIN 2019 (1), 2020 (1), 2021 (2), 2022 (2).
- Reviewer, CMD-IT/ACM Richard Tapia Conference (Richard Tapia Celebration of Diversity in Computing Conference), 2021 (4).
- Reviewer, Frontiers of Information Technology & Electronic Engineering, 2021 (1).
- Reviewer, MDPI (Applied Sciences; Computers; Electronics; Future Internet; Information; Inventions; Mathematics; Sensors). 2018-2022 (30+)
- Reviewer, JASIST (Journal of the Association for Information Science and Technology), 2020 (1).
- Reviewer, NCWIT Seed Fund, Fall 2020 (3).
- Reviewer, Women in Machine Learning (WiML) Workshop. 2019 (3).
- Participant of NCWIT SUMMIT, Nashville, Tennessee, May 14-16, 2019.
- Program Committee Member of FLAIRS-31, 2018 (3), FLAIRS-32, 2019.
- Chair of FLAIRS-31 Special Track of Artificial Intelligence in Digital Humanities, 2018.
- Editor of Special Issue "AI for Digital Humanities" of Information (ISSN 2078-2489), 2018.
- Program Committee Member of 9th International Conference of Digital Archives and Digital Humanities (DADH), 2018.
- Program Committee Member of The second edition of the workshop on "Corpus-based Research in the Humanities" (CRH), 2018.
- Program Committee Member of International Conference on Intelligent, Secure, and Dependable Systems in Distributed and Cloud Environments (ISDDC 2017).
- Chair of FLAIRS-30 Special Track of Natural Language Processing of Ancient and other Low-resource Languages, 2017.
- Reviewer of FLAIRS-30, 2016-2017.

<sup>&</sup>lt;sup>1</sup>The first number is the number of long papers, and the second number is the number of posters.

- Track Chair of FLAIRS-29 Special Track of Natural Language Processing of Ancient Languages, 2016
- Program Committee Member of International Workshop on Information Security, Assurance, and Trust (I-SAT 2016)
- Reviewer of I-SAT 2016
- Reviewer of Journal of Computational Intelligence, 2016
- Reviewer of Journal of the Association for Information Science and Technology, 2016, 2020
- Reviewer, Journal of Intelligent and Fuzzy Systems, 2012
- Reviewer, AAAI, 2010

#### University, College and Department Committees

- CS Transfer Advisor, Fall 2023 -
- CS Faculty Search Committee, Fall 2021 Winter 2022.
- CS MS Program Expansion Strategic Plan Working Group, Fall 2021 Winter 2022.
- CSE Personnel Committee (Participating in the PTR Review as CS representative), Spring 2021.
- CS Chair Search Committee, Fall 2019 Winter 2020.
- WWU Academic Working Group of Western Global Pathway Program, Summer 2019.
- CS Graduate Program Director, Chair of Graduate Committee (Fall 2018 summer 2022).
- CS/SMATE Faculty Search Committee, Fall 2018 Winter 2019.
- CSE Equity, Inclusion, and Diversity Committee (Fall 2017- Spring 2019).
- WWU Graduate Council (Fall 2016-2018)
- CS Ed Search Committee (Fall 2016 Winter 2017)
- CS Student Centered Learning Committee (Fall 2016 Winter 2019)
- Affiliated Faculty of Linguistics Program@WWU, 2015 current.
- WWU Team Member (as one of the change leaders) of NCWIT's PaceSetters Program, 2016
- CS Graduate Committee (Fall 2014 Spring 2018)
- CS Undergraduate Curriculum Committee (2013-2014)

#### OTHER RELEVANT AND NOTABLE SERVICE ACTIVITIES

- Member of BETTER in STEM (SMATE, WWU) Computer Science Cohort 1, Summer 2022 Spring 2024.
- Member of CS Team of AEES (Advancing Equity and Excellence in Science, Sponsored by SMATE) Summer Curriculum Development Program, Summer 2022, 2023.
- Co-organizer of two CS Equity-focused Teaching Workshops, Fall 2021 and Winter 2022.
- Course coordinator of CSCI 301, Fall 2021 Spring 2022.
- Member of the departmental CS/DS/BAE/CyberSecurity Admission working group and Premajor working group, Spring 2021.
- CS Probationary Faculty Mentor, Fall 2020 Spring 2021.
- Change Leader for WWU CS in the National Center for Women in Information Technology Pacesetters program, 2018 - 2020.
- Invited Panelist of WWU AWC (Association for Women in Computing) "CS Stories", 3 5pm @ Willson Library Reading Room, May 23, 2019.
- Invited Panelist of AEES (Advancing Excellence and Equity in Science) Faculty for an HHMI funded professional development workshop, 12:45 2:00pm, April 27, 2019.
- Invited Speaker of Technology Alliance Group for Northwest Washington (TAGNW) Tech Expo, Breakout Session "Inclusion: Why More Room at the Table Makes Sense.", Nov 8, 2018.
- Participant of "Faculty Mentors" at CS/M Scholars Welcoming Event, Oct 9, 2018.
- External Reviewer of Promotion to Senior Instructor at Institute of Technology, UW Tacoma (UWT), Summer 2016.
- Presenting in CS Graduate Open House, WWU, Nov 12, 2016

- Judge of WWU Student Robot Competition and Mobile App Showcase, June 3, 2016
- Co-organizing "Connections: Strengthening the Community of Western Women in CS", April 21, 2016
- Co-presenting on "A Survey of Computational Linguistic Research at Western", 2016 Let's Talk Series, Linguistics Program, WWU, Feb 18, 2016.
- Panelist of "Round Table Discussion: Women in Science" at Western, April 15, 2015.
- Panelist of New Faculty Workshop Panel by C-Core, September 9-11, 2015, SMATE@WWU
- Mentor and Judge of Students' Posters for Scholars Week at Western (May 15-16, 2014, May 14-15, 2015).
- Compass to Campus, Oct 26, 2014, Sumerian Project Presentation.
- Back-2-Bellingham, May 17, 2014, Research Project Showcase.
- Co-hosted Graduate Seminar (Fall 2014) with Brian Hutchinson
- Guest Speaker of an Event Organized by Women's Center at Western themed with "Attracting more women to STEM". April 8, 2014.
- CS Department undergraduate advisor (2013-current)
- Participated in teaching of CSCI 495 and Grad Seminar (2013-2018)
- Community service through Bellingham Chinese Christian Church (2015-)

#### Professional DEVELOPMENT

- BETTER in STEM Workshop, WWU, Aug. 8 10, 2022; Feb 4, 2023, Aug. 7-9, 2023.
- Values-based Academic Leadership Trajectories for Women in STEM (VAuLTS): The Northwest Regional Partnership. Funded by NSF ADVANCE. Hosted by WSU. Winter 2020 - 2023.
- Workshop of Sustaining Inclusive, Student-Centered Instruction, WWU, Sept 15, 2021.
- Fundamentals of POGIL (Process Oriented Guided Inquiry Learning) virtual Workshop. Nov 14, 2020.
- Blended/Online Course Development Boot Camp (6/29-7/17, 2020) by Instructional Design at
- Took online classes of "Deep Learning Tensor Flow", Dec 2016.
- Participated in Faculty Cohort 2 of the NSF funded "Change at the Core" (C-Core) project, WWU.
- Participated in C-Core Summer Academy, WWU, August, 2015, 2016.
- Participated in the NSF Day at University of Washington Bothell, April 1, 2015.

#### Professional Affiliations

- Association of Computer Linguistics (2014 current)
- Association of Computer Machinery (2014 current)

- HONOR AND AWARD The only nomination from SFU for Canadian AI Association AI Doctoral Dissertation Award
  - Ebco/Eppich Scholarship Spring 2007
  - SFU President's Ph.D. Research Stipend Fall 2006
  - Computing Science Graduate Fellowship Summer 2006, Fall 2005
  - Graduate Fellowship Summer 2005
  - Graduate Scholarship 1999-2002
  - First Class Scholarship 1995-1999

Updated on September 18, 2023.