

# Natalie Parde

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## Education

- 2018 | **Ph.D., Computer Science and Engineering**  
*University of North Texas (4.0/4.0)*
- 2016 | **M.S., Computer Science**  
*University of North Texas (4.0/4.0)*
- 2013 | **B.S., Computer Science**  
*University of North Texas (Summa Cum Laude)*

## Academic Appointments

- 2018 - Ongoing | **University of Illinois Chicago**  
Chicago, Illinois  
*Assistant Professor, Department of Computer Science, 2018–Present*  
*Co-Director, Natural Language Processing Laboratory, 2018–Present*  
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**Additional UIC Appointments:**  
*Faculty Member, AI.Health4All Center for Health Equity using Machine Learning and Artificial Intelligence, 2024–Present*  
*Affiliate Faculty, Honors College, 2020–Present*
- 2018 | **University of North Texas Health Science Center**  
Fort Worth, Texas  
*Programmer, Human Movement Performance Laboratory*
- 2014 | **National Centre of Scientific Research Demokritos**  
Athens, Greece  
*Visiting Researcher, Software and Knowledge Engineering Laboratory*
- 2012 - 2018 | **University of North Texas**  
Denton, Texas  
*Research Fellow, Human Intelligence and Language Technologies Laboratory, 2015-2018*  
*Research Assistant, Human Intelligence and Language Technologies Laboratory, 2013-2015*  
*Research Assistant, Reconfigurable Computing Laboratory, 2012-2013*

## Research Grants

### SCH: Fair and Interpretable Prediction of Alzheimer's Disease and MCI using LLMs

*National Institutes of Health | \$1,158,860 | August 2024 – May 2028*

Investigators: **Natalie Parde** (PI, UIC Computer Science), Lu Cheng (Co-I, UIC Computer Science), Erin Sundermann, Raeanne Moore (Co-Is, UCSD Psychiatry)

### Chicago Data-driven OUD Screening, Engagement, Treatment and Planning (C-DOSETaP) System

## Summary of Funding

	PI	Co-PI	Total
<b>Federal Grants</b>	\$2,478,583.00	\$1,475,448.00	\$3,954,031.00
<b>Foundation Grants</b>	\$0.00	\$25,407.00	\$25,407.00
<b>University Seed Grants</b>	\$0.00	\$289,999.13	\$289,999.13
<b>Computing Credits</b>	\$14,750.00	\$0.00	\$14,750.00
<b>Total</b>	<b>\$2,493,333.00</b>	<b>\$1,790,854.13</b>	<b>\$4,284,187.13</b>

Note: Co-PI includes subaward PI roles. Amounts are based on the full grant amounts listed in *Research Grants*.

*National Institutes of Health* | \$1,093,394 | September 2023 – August 2025

Investigators: Niranjan Karnik (PI, UIC Psychiatry), Sarah Messmer, Alfreda Holloway-Beth, Christopher Holden, **Natalie Parde**, Nicole Gastala, John Zulueta, Bhrandon Harris, Dale Smith, and Jennifer Jarrett (Co-Is, UIC)

### **Automating Assessment of Contextualization of Care During the Clinical Encounter**

*National Institutes of Health* | \$221,912 | April 2023 – November 2023

Investigators: Saul Weiner (PI, Institute for Practice and Provider Performance Improvement Inc.) and **Natalie Parde** (Subaward PI, UIC Computer Science)

- Subaward to UIC: \$89,398

### **Analytics and Artificial Intelligence for Cardio-Oncology**

*UIC-OSF Community Health Advocacy (CHA) Program* | \$74,999.13 | June 2022 – June 2023

Investigators: Jacob Krive (PI, UIC Biomedical and Health Information Sciences); Chetan Bhardwaj (PI, OSF Healthcare System); Christopher Gans, Karl Kochendorfer, **Natalie Parde**, and Kataria Sandeep (Co-Is, UIC)

### **SCC-IRG Track 2: Smart and Connected Family Engagement for Equitable Early Intervention Service Design**

*National Science Foundation* | \$1,187,723 | October 2021 – September 2024

Investigators: **Natalie Parde** (PI, UIC Computer Science), Mary Khetani (Co-PI, UIC Occupational Therapy), and Jodi Dooling-Litfin (Co-PI, Rocky Mountain Human Services)

- Original Award: \$1,171,723
- REU Supplement (Awarded May 2023): \$16,000

### **Social Cognition and Suicide in Psychotic Disorders**

*National Institutes of Health/National Institute of Mental Health* | \$160,142 | October 2021 – January 2023

Investigators: Colin Depp (PI, UCSD Psychiatry), Amy Pinkham (Subaward PI, UTD Psychology), Philip Harvey (Subaward PI, UMiami Psychiatry) and **Natalie Parde** (Subaward PI, UIC Computer Science)

- Subaward to UIC: \$117,000

### **Effects of an Intelligent Virtual Assistant in a Noisy Environment on Office Workers' Physical and Cognitive Loads**

*Office Ergonomics Research Committee* | \$25,407 | January 2021 – December 2021

Investigators: Heejin Jeong (PI, UIC Mechanical and Industrial Engineering), **Natalie Parde** (Co-I, UIC Computer Science), and Myunghee Kim (Co-I, UIC Mechanical and Industrial Engineering)

### **CREATE WISDOM: Addressing Wicked Problems in Healthcare through Informatics, Engineering, Data Science and Medicine**

*UI Discovery Partners Institute* | \$125,000 | August 2020 – July 2021

Investigators: Karl Kochendorfer (PI, UI Health); Ravishankar Iyer (Co-PI, UIUC); Andrew Trotter, Martha Daviglius, Christian Ascoli, Scott Borgetti, Stephen Brown, Bill Galanter, Olga Garcia-Bedoya, Bhrandon Harris, Min Joo, Martha Menchaca, Richard Novak, and Tushar Patel (Co-Is, UI Health); Narendra Ahuja, Anu Aggarwal, Masooda Bashir, Roy

Campbell, David Forsyth, Sanmi Koyejo, and ChengXiang Zhai (Co-Is, UIUC); Andy Boyd, Houshang Darabi, and **Natalie Parde** (Co-Is, UIC); Bala Hota and Casey Frankenberger (Co-Is, Rush University Medical Center); Liewei Wang (Co-I, Mayo Clinic); Justin B. Starren (Co-I, Northwestern University); Paul Arnold (Co-I, Carle Foundation Hospital); Ayis Pyrros (Co-I, DuPage Medical Group); Sarah de Ramirez (Co-I, OSF Healthcare)

### **Artificial Intelligence Modeling for COVID-19 Disease (AIMCOVID)**

*UIC Center for Clinical and Translational Science | \$30,000 | May 2020 – April 2021*

Investigators: Andrew Trotter (PI, UIC Clinical Medicine), Christian Ascoli (Co-I, UIC Medicine), Scott Borgetti (Co-I, UIC Clinical Medicine), Andrew Boyd (Co-I, UIC Biomedical and Health Information Sciences), Houshang Darabi (Co-I, UIC Mechanical and Industrial Engineering), William Galanter (Co-I, UIC Medicine), Bhrandon Harris (Co-I, UIC Family Medicine), Ravishankar Iyer (Co-I, UIUC Electrical and Computer Engineering), Min Joo (Co-I, UIC Medicine), Karl Kochendorfer (Co-I, UIC Clinical Family Medicine), Martha Menchaca (Co-I, UIC Radiology), Richard Novak (Co-I, UIC Medicine), **Natalie Parde** (Co-I, UIC Computer Science)

### **Alzheimer's Disease Research Center Pilot Grant**

*University of California, San Diego | \$60,000 | March 2020 – February 2022*

Investigators: Erin Sundermann (PI, UCSD Psychiatry), Raeanne Moore (Co-I, UCSD Psychiatry), Tamar Gollan (Co-I, UCSD Psychiatry), **Natalie Parde** (Consultant, UIC Computer Science), Alex Leow (Consultant, UIC Psychiatry)

### **Google Cloud Platform Research Credits Grant**

*Google | \$5000 | January 2019 – December 2019*

Investigators: **Natalie Parde** (PI, UIC Computer Science)

### **National Science Foundation Graduate Research Fellowship**

*National Science Foundation | \$132,000 | April 2014 – August 2018*

Investigators: **Natalie Parde** (PI, UNT Computer Science and Engineering)

## **Additional Support**

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### **Google Cloud Education Credits**

*Google | \$50/student × Estimated 35 students | January 2024 – May 2024*

*Google | \$50/student × Estimated 90 students | August 2023 – December 2023*

*Google | \$50/student × Estimated 35 students | January 2023 – May 2023*

*Google | \$50/student × Estimated 70 students | August 2022 – December 2022*

Investigators: **Natalie Parde** (PI, UIC Computer Science)

## **Honors**

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**College of Engineering (COE) Teaching Award**, University of Illinois Chicago, 2024

**Honoring Our Professors' Excellence (HOPE) Award**, University of Illinois Chicago, 2024

**College of Engineering (COE) Teaching Award**, University of Illinois Chicago, 2021

**Outstanding Reviewer**, Conference on Empirical Methods in Natural Language Processing, 2020

**Outstanding Reviewer**, Association for Computational Linguistics, 2020

**Outstanding Reviewer**, North American Chapter of the Association for Computational Linguistics, 2019

**Outstanding Ph.D. Student**, Department of Computer Science and Engineering, University of North Texas, 2018

**Dr. Hermann Zemlicka Award for Most Visionary Paper**, Gmunden Retreat on NeuroIS, 2017

**Golden Eagle Award**, University of North Texas, 2016

**First Place Project**, International Research-centered Summer School in Cognitive Systems and Interactive Robotics, Data and Content Analysis, 2014

**People's Choice Project**, International Research-centered Summer School in Cognitive Systems and Interactive Robotics, Data and Content Analysis, 2014

Honors Scholar Award, UNT Honors College, 2013

## Additional Competitive Awards

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### Travel Grants

**Connections in Smart Health Workshop Travel Award**, National Science Foundation, 2018

**SemBEaR Student Travel Grant**, NAACL Workshop on Computational Semantics Beyond Events and Roles/National Science Foundation, 2018

**AAAI Doctoral Consortium Travel Grant**, Association for the Advancement of Artificial Intelligence, 2018

**Grace Hopper Scholarship**, Google, 2017

**EMNLP Student Scholarship**, Special Interest Group on Linguistic Data and Corpus-based Approaches to NLP, 2017

**Toulouse Graduate School Travel Grant**, University of North Texas, 2018 and 2017

**College of Engineering Travel Grant**, University of North Texas, 2018, 2017, and 2014

**Departmental Travel Award**, Department of Computer Science and Engineering, University of North Texas, 2018, 2016, 2015, and 2013

**IJCAI Doctoral Consortium Travel Grant**, International Joint Conference on Artificial Intelligence/National Science Foundation, 2015

**CRA-W Workshop and Travel Scholarship**, CRA Committee on the Status of Women in Computing, 2016, 2015, and 2014

### Scholarships

**Graduate Assistantship Tuition Scholarship**, University of North Texas, 2013

**Academic Achievement Scholarship**, University of North Texas, 2013

**Engineering Ambassador Scholarship**, College of Engineering, University of North Texas, 2012

**C.J. Davidson Honors Scholarship**, Honors College, University of North Texas, 2011

**Achievement Scholarship**, University of North Texas, 2009

**Board of Regents' Excellence Scholarship**, University of North Texas, 2009-2013

### Publications

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Note: The \* following an individual's name indicates that they are a member of my research team.

### Book Chapters

2023

1. **Natalie Parde** (2023). "Natural language processing". In: *The SAGE Handbook of Human–Machine Communication*. SAGE Publications Limited. Chap. 36, pp. 318–326

### Journal Articles

2023

9. Vera C. Kaelin\*, Andrew D. Boyd, Martha M. Werler, **Natalie Parde**, and Mary A. Khetani (Dec. 2023). "Natural Language Processing to Classify Caregiver Strategies Supporting Participation Among Children and Youth with Craniofacial Microsomia and Other Childhood-Onset Disabilities". In: *Journal of Healthcare Informatics Research* 7.4, pp. 480–500
8. Vivian C. Villegas, Dianna L. Bosak, Zurisadai Salgado, Michelle Phoenix, **Natalie Parde**, Rachel Teplicky, Mary A. Khetani, L. Kuznicki, A. Pedrow, A. Howell, and High Value Early Intervention Research Group (Aug. 2023). "Diversified caregiver input to upgrade the Young Children's Participation and Environment Measure for equitable pediatric re/habilitation practice". In: *Journal of Patient-Reported Outcomes* 7.1, p. 87

7. Xiaoxu Ding, Kelli Wuerth, Brodie Sakakibara, Julia Schmidt, **Natalie Parde**, Liisa Holsti, and Skye Barbic (June 2023). “Understanding Mobile Health and Youth Mental Health: A Scoping Review”. In: *JMIR mHealth and uHealth*
6. Parian Haghighat, Toan Nguyen, Mina Valizadeh\*, Mohammad Arvan\*, **Natalie Parde**, Myunghee Kim, and Heejin Jeong (May 2023). “Effects of an intelligent virtual assistant on office task performance and workload in a noisy environment”. In: *Applied Ergonomics* 109, p. 103969
5. Sean S. Huang, Lelia H. Chaisson, William Galanter, Arash Jalali, Martha Menchaca, **Natalie Parde**, Jorge M. Rodríguez-Fernández, Andrew Trotter, and Karl M. Kochendorfer (Mar. 2023). “Lessons learned: Development of COVID-19 clinical staging models at a large urban research institution”. In: *Journal of Clinical and Translational Science* 7.1, e113

## 2022

4. Vera C. Kaelin\*, Mina Valizadeh\*, Zurisadai Salgado, Julia G. Sim, Dana Anaby, Andrew D. Boyd, **Natalie Parde**, and Mary A. Khetani (2022). “Capturing and Operationalizing Participation in Pediatric Re/Habilitation Research Using Artificial Intelligence: A Scoping Review”. In: *Frontiers in Rehabilitation Sciences* 3

## 2021

3. Vera C Kaelin\*, Mina Valizadeh\*, Zurisadai Salgado, **Natalie Parde**, and Mary A Khetani (Nov. 2021). “Artificial Intelligence in Rehabilitation Targeting the Participation of Children and Youth With Disabilities: Scoping Review”. In: *J Med Internet Res* 23.11, e25745

## 2013

2. Gayatri Mehta, Krunal Kumar Patel, **Natalie Parde**, and Nancy S. Pollard (2013). “Data-Driven Mapping Using Local Patterns”. In: *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems* 32.11, pp. 1668–1681
1. Gayatri Mehta, Carson Crawford, Xiaozhong Luo, **Natalie Parde**, Krunalkumar Patel, Brandon Rodgers, Anil Kumar Sistla, Anil Yadav, and Marc Reisner (Oct. 2013). “UNTANGLED: A Game Environment for Discovery of Creative Mapping Strategies”. In: *ACM Transactions on Reconfigurable Technology and Systems* 6.3

## Peer-Reviewed Conference Papers

### 2024

33. Shahla Farzana\*, Edoardo Stoppa\*, Alex Leow, Tamar Gollan, Raeanne Moore, David Salmon, Douglas Galasko, Erin Sundermann, and **Natalie Parde** (May 2024). “SLaCAD: A Spoken Language Corpus for Early Alzheimer’s Disease Detection”. In: *Proceedings of the 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING 2024)*. Ed. by Nicoletta Calzolari, Min-Yen Kan, Veronique Hoste, Alessandro Lenci, Sakriani Sakti, and Nianwen Xue. Torino, Italia: ELRA and ICCL, pp. 14877–14897
32. Baris Karacan, Ankit Aich\*, Avery Quynh, Amy Pinkham, Philip Harvey, Colin Depp, and **Natalie Parde** (May 2024). “Towards Comprehensive Language Analysis for Clinically Enriched Spontaneous Dialogue”. In: *Proceedings of the 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING 2024)*. Ed. by Nicoletta Calzolari, Min-Yen Kan, Veronique Hoste, Alessandro Lenci, Sakriani Sakti, and Nianwen Xue. Torino, Italia: ELRA and ICCL, pp. 16457–16472
31. Gyeongun Lee\* and **Natalie Parde** (May 2024). “AcnEmpathize: A Dataset for Understanding Empathy in Dermatology Conversations”. In: *Proceedings of the 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING 2024)*. Ed. by Nicoletta Calzolari, Min-Yen Kan, Veronique Hoste, Alessandro Lenci, Sakriani Sakti, and Nianwen Xue. Torino, Italia: ELRA and ICCL, pp. 143–153
30. Hoang Nguyen, Chenwei Zhang, Ye Liu, **Natalie Parde**, Eugene Rohrbach, and Philip S. Yu (May 2024). “CORI: CJKV Benchmark with Romanization Integration - a Step towards Cross-lingual Transfer beyond Textual Scripts”. In: *Proceedings of the 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING 2024)*. Ed. by Nicoletta Calzolari, Min-Yen Kan, Veronique Hoste, Alessandro Lenci, Sakriani Sakti, and Nianwen Xue. Torino, Italia: ELRA and ICCL, pp. 4008–4020

29. Mina Valizadeh\*, Vera C. Kaelin\*, Mary A. Khetani, and **Natalie Parde** (May 2024). “CareCorpus: A Corpus of Real-World Solution-Focused Caregiver Strategies for Personalized Pediatric Rehabilitation Service Design”. In: *Proceedings of the 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING 2024)*. Ed. by Nicoletta Calzolari, Min-Yen Kan, Veronique Hoste, Alessandro Lenci, Sakriani Sakti, and Nianwen Xue. Torino, Italia: ELRA and ICCL, pp. 2871–2882
28. Youheng W. Wong, **Natalie Parde**, and Erdem Koyuncu (May 2024). “Humanistic Buddhism Corpus: A Challenging Domain-Specific Dataset of English Translations for Classical and Modern Chinese”. In: *Proceedings of the 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING 2024)*. Ed. by Nicoletta Calzolari, Min-Yen Kan, Veronique Hoste, Alessandro Lenci, Sakriani Sakti, and Nianwen Xue. Torino, Italia: ELRA and ICCL, pp. 8406–8417

## 2023

27. Gyeongun Lee\*, Xunfei Jiang, and **Natalie Parde** (Dec. 2023). “A Content-based Skincare Product Recommendation System”. In: *2023 International Conference on Machine Learning and Applications (ICMLA)*, pp. 2039–2043
26. Edoardo Stoppa\*, Guido Walter Di Donato, Isabella Poles, Eleonora D’Arnese, **Natalie Parde**, and Marco Domenico Santambrogio (Oct. 2023). “A Graph Machine Learning approach to Automatic Dementia Detection”. In: *2023 IEEE EMBS International Conference on Biomedical and Health Informatics (BHI)*, pp. 1–4
25. Mohammad Arvan\*, A. Seza Dođruöz, and **Natalie Parde** (Aug. 2023). “Investigating Reproducibility at Interspeech Conferences: A Longitudinal and Comparative Perspective”. In: *Proceedings of the 24th INTERSPEECH Conference*. Dublin, Ireland: International Speech and Communication Association, Accepted
24. Mohammad Arvan\*, Mina Valizadeh\*, Parian Haghighat, Toan Nguyen, Heejin Jeong, and **Natalie Parde** (July 2023). “Linguistic Cognitive Load Analysis on Dialogues with an Intelligent Virtual Assistant”. In: *Proceedings of the 2023 Annual Meeting of the Cognitive Science Society*. Sydney, Australia, pp. 244–252
23. Shahla Farzana\* and **Natalie Parde** (July 2023). “Towards Domain-Agnostic and Domain-Adaptive Dementia Detection from Spoken Language”. In: *Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*. Toronto, Canada: Association for Computational Linguistics, pp. 11965–11978
22. Maja Popović, Mohammad Arvan\*, **Natalie Parde**, and Anya Belz (July 2023). “Exploring Variation of Results from Different Experimental Conditions”. In: *Findings of the Association for Computational Linguistics: ACL 2023*. Toronto, Canada: Association for Computational Linguistics, pp. 2746–2757
21. Mina Valizadeh\*, Xing Qian\*, Pardis Ranjbar-Noiey\*, Cornelia Caragea, and **Natalie Parde** (May 2023). “What Clued the AI Doctor In? On the Influence of Data Source and Quality for Transformer-Based Medical Self-Disclosure Detection”. In: *Proceedings of the 17th Conference of the European Chapter of the Association for Computational Linguistics*. Dubrovnik, Croatia: Association for Computational Linguistics, pp. 1201–1216
20. Ja Eun Yu, **Natalie Parde**, and Debaleena Chattopadhyay (Apr. 2023). ““Where is History”: Toward Designing a Voice Assistant to Help Older Adults Locate Interface Features Quickly”. In: *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems*. CHI ’23. Hamburg, Germany: Association for Computing Machinery

## 2022

19. Ankit Aich\*, Avery Quynh, Varsha Badal, Amy Pinkham, Philip Harvey, Colin Depp, and **Natalie Parde** (Dec. 2022). “Towards Intelligent Clinically-Informed Language Analyses of People with Bipolar Disorder and Schizophrenia”. In: *Findings of the Association for Computational Linguistics: EMNLP 2022*. Abu Dhabi, United Arab Emirates: Association for Computational Linguistics, pp. 2871–2887
18. Mohammad Arvan\*, Luís Pina, and **Natalie Parde** (Dec. 2022). “Reproducibility in Computational Linguistics: Is Source Code Enough?” In: *Proceedings of the 2022 Conference on Empirical Methods in Natural Language Processing*. Abu Dhabi, United Arab Emirates: Association for Computational Linguistics, pp. 2350–2361
17. Ankit Aich\*, Souvik Bhattacharya\*, and **Natalie Parde** (Oct. 2022). “Demystifying Neural Fake News via Linguistic Feature-Based Interpretation”. In: *Proceedings of the 29th International Conference on Computational Linguistics*. Gyeongju, Republic of Korea: International Committee on Computational Linguistics, pp. 6586–6599
16. Shahla Farzana\* and **Natalie Parde** (Sept. 2022). “Are Interaction Patterns Helpful for Task-Agnostic Dementia Detection? An Empirical Exploration”. In: *Proceedings of the 23rd Annual Meeting of the Special Interest Group on*

*Discourse and Dialogue*. Edinburgh, UK: Association for Computational Linguistics, pp. 172–182

15. Ankit Aich\* and **Natalie Parde** (June 2022). “Telling a Lie: Analyzing the Language of Information and Misinformation during Global Health Events”. In: *Proceedings of the Language Resources and Evaluation Conference*. Marseille, France: European Language Resources Association, pp. 4135–4141
14. Megan Herrera\*, Ankit Aich\*, and **Natalie Parde** (June 2022). “TweetTaglish: A Dataset for Investigating Tagalog-English Code-Switching”. In: *Proceedings of the Language Resources and Evaluation Conference*. Marseille, France: European Language Resources Association, pp. 2090–2097
13. Mina Valizadeh\* and **Natalie Parde** (May 2022). “The AI Doctor Is In: A Survey of Task-Oriented Dialogue Systems for Healthcare Applications”. In: *Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*. Dublin, Ireland: Association for Computational Linguistics, pp. 6638–6660

## 2021

12. Mina Valizadeh\*, Pardis Ranjbar-Noiey\*, Cornelia Caragea, and **Natalie Parde** (June 2021). “Identifying Medical Self-Disclosure in Online Communities”. In: *Proceedings of the 2021 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies*. Online: Association for Computational Linguistics, pp. 4398–4408

## 2020

11. Shahla Farzana\* and **Natalie Parde** (Oct. 2020). “Exploring MMSE Score Prediction Using Verbal and Non-Verbal Cues”. In: *Proceedings of Interspeech 2020*. Online: International Speech Communication Association, pp. 2207–2211
10. Shahla Farzana\*, Mina Valizadeh\*, and **Natalie Parde** (May 2020). “Modeling Dialogue in Conversational Cognitive Health Screening Interviews”. English. In: *Proceedings of the 12th Language Resources and Evaluation Conference*. Marseille, France: European Language Resources Association, pp. 1167–1177

## 2019

9. **Natalie Parde** and Rodney D. Nielsen (June 2019). “AI Meets Austen: Towards Human-Robot Discussions of Literary Metaphor”. In: *Artificial Intelligence in Education*. Ed. by Seiji Isotani, Eva Millán, Amy Ogan, Peter Hastings, Bruce McLaren, and Rose Luckin. Cham: Springer International Publishing, pp. 213–219

## 2018

8. **Natalie Parde** and Rodney Nielsen (Nov. 2018a). “Automatically Generating Questions about Novel Metaphors in Literature”. In: *Proceedings of the 11th International Conference on Natural Language Generation*. Tilburg University, The Netherlands: Association for Computational Linguistics, pp. 264–273
7. **Natalie Parde** and Rodney Nielsen (May 2018b). “A Corpus of Metaphor Novelty Scores for Syntactically-Related Word Pairs”. In: *Proceedings of the Eleventh International Conference on Language Resources and Evaluation (LREC 2018)*. Miyazaki, Japan: European Language Resources Association (ELRA)
6. **Natalie Parde** and Rodney Nielsen (Apr. 2018c). “Exploring the Terrain of Metaphor Novelty: A Regression-Based Approach for Automatically Scoring Metaphors”. In: *Proceedings of the AAAI Conference on Artificial Intelligence*. Vol. 32. 1. New Orleans, Louisiana: Association for the Advancement of Artificial Intelligence

## 2017

5. **Natalie Parde** and Rodney Nielsen (Sept. 2017a). “Finding Patterns in Noisy Crowds: Regression-based Annotation Aggregation for Crowdsourced Data”. In: *Proceedings of the 2017 Conference on Empirical Methods in Natural Language Processing*. Copenhagen, Denmark: Association for Computational Linguistics, pp. 1907–1912
4. **Natalie Parde** and Rodney Nielsen (May 2017b). “#SarcasmDetection Is Soooo General! Towards a Domain-Independent Approach for Detecting Sarcasm”. In: *Florida Artificial Intelligence Research Society Conference*. Marco Island, Florida

## 2015

3. Michalis Papakostas, Konstantinos Tsiakas, **Natalie Parde**, Vangelis Karkaletsis, and Fillia Makedon (July 2015). “An Interactive Framework for Learning User-Object Associations through Human-Robot Interaction”. In: *Proceedings of the 8th ACM International Conference on Pervasive Technologies Related to Assistive Environments*. PETRA '15. Corfu, Greece: Association for Computing Machinery
2. **Natalie Parde**, Adam Hair, Michalis Papakostas, Konstantinos Tsiakas, Maria Dagioglou, Vangelis Karkaletsis, and Rodney D. Nielsen (July 2015). “Grounding the Meaning of Words through Vision and Interactive Gameplay”. In: *Proceedings of the 24th International Conference on Artificial Intelligence*. IJCAI'15. Buenos Aires, Argentina: AAAI Press, pp. 1895–1901

## 2013

1. Gayatri Mehta, Xiaozhong Luo, **Natalie Parde**, Krunalkumar Patel, Brandon Rodgers, and Anil Kumar Sistla (June 2013). “UNTANGLED - An interactive mapping game for engineering education”. In: *2013 IEEE International Conference on Microelectronic Systems Education (MSE)*. Austin, Texas, pp. 40–43

## Peer-Reviewed Workshop or Symposium Papers

### 2024

23. Mohammad Arvan\* and **Natalie Parde** (May 2024). “ReproHum #0712-01: Human Evaluation Reproduction Report for “Hierarchical Sketch Induction for Paraphrase Generation””. In: *Proceedings of the Fourth Workshop on Human Evaluation of NLP Systems (HumEval) @ LREC-COLING 2024*. Ed. by Simone Balloccu, Anya Belz, Rudali Huidrom, Ehud Reiter, Joao Sedoc, and Craig Thomson. Torino, Italia: ELRA and ICCL, pp. 210–220

### 2023

22. Mohammad Arvan\* and **Natalie Parde** (Sept. 2023). “Human Evaluation Reproduction Report for Data-to-text Generation with Macro Planning”. In: *Proceedings of the 3rd Workshop on Human Evaluation of NLP Systems*. Ed. by Anya Belz, Maja Popović, Ehud Reiter, Craig Thomson, and João Sedoc. Varna, Bulgaria: INCOMA Ltd., Shoumen, Bulgaria, pp. 89–96
21. Anya Belz, Craig Thomson, Ehud Reiter, Gavin Abercrombie, Jose M. Alonso-Moral, Mohammad Arvan\*, Jackie Cheung, Mark Cieliebak, Elizabeth Clark, Kees van Deemter, Tanvi Dinkar, Ondřej Dušek, Steffen Eger, Qixiang Fang, Albert Gatt, Dimitra Gkatzia, Javier González-Corbelle, Dirk Hovy, Manuela Hürlimann, Takumi Ito, John D. Kelleher, Filip Klubicka, Huiyuan Lai, Chris van der Lee, Emiel van Miltenburg, Yiru Li, Saad Mahamood, Margot Mieskes, Malvina Nissim, **Natalie Parde**, Ondřej Plátek, Verena Rieser, Pablo Mosteiro Romero, Joel Tetreault, Antonio Toral, Xiaojun Wan, Leo Wanner, Lewis Watson, and Diyi Yang (May 2023). “Missing Information, Unresponsive Authors, Experimental Flaws: The Impossibility of Assessing the Reproducibility of Previous Human Evaluations in NLP”. In: *The Fourth Workshop on Insights from Negative Results in NLP*. Dubrovnik, Croatia: Association for Computational Linguistics, pp. 1–10

### 2022

20. Devika Tiwari and **Natalie Parde** (Dec. 2022). “An Exploration of Linguistically-Driven and Transfer Learning Methods for Euphemism Detection”. In: *Proceedings of the 3rd Workshop on Figurative Language Processing (FLP)*. Abu Dhabi, United Arab Emirates (Hybrid): Association for Computational Linguistics, pp. 131–136
19. Edoardo Stoppa\*, Guido Walter Di Donato, **Natalie Parde**, and Marco Domenico Santambrogio (Aug. 2022). “Computer-Aided Dementia Detection: How Informative Are Your Features?” In: *2022 IEEE 7th Forum on Research and Technologies for Society and Industry Innovation (RTSI)*. Paris, France, pp. 55–61
18. Mohammad Arvan\*, Luís Pina, and **Natalie Parde** (July 2022). “Reproducibility of Exploring Neural Text Simplification Models: A Review”. In: *Proceedings of the 15th International Conference on Natural Language Generation: Generation Challenges*. Waterville, Maine: Association for Computational Linguistics



17. Ankit Aich\* and **Natalie Parde** (July 2022). “Are You Really Okay? A Transfer Learning-based Approach for Identification of Underlying Mental Illnesses”. In: *Proceedings of the Eighth Workshop on Computational Linguistics and Clinical Psychology*. Seattle, USA: Association for Computational Linguistics, pp. 89–104
16. Charic Farinango Cuervo\* and **Natalie Parde** (July 2022). “Exploring Contrastive Learning for Multimodal Detection of Misogynistic Memes”. In: *Proceedings of the 16th International Workshop on Semantic Evaluation (SemEval-2022)*. Seattle, United States: Association for Computational Linguistics, pp. 785–792
15. Shahla Farzana\*, Ashwin Deshpande\*, and **Natalie Parde** (May 2022). “How You Say It Matters: Measuring the Impact of Verbal Disfluency Tags on Automated Dementia Detection”. In: *Proceedings of the Workshop on Biomedical Language Processing (BioNLP 2022)*. Dublin, Ireland: Association for Computational Linguistics

## 2021

14. Cade Gordon\* and **Natalie Parde** (Dec. 2021). “Latent Neural Differential Equations for Video Generation”. In: *NeurIPS 2020 Workshop on Pre-registration in Machine Learning*. Ed. by Luca Bertinetto, João F. Henriques, Samuel Albanie, Michela Paganini, and Gül Varol. Vol. 148. Proceedings of Machine Learning Research. Proceedings of Machine Learning Research, pp. 73–86
13. Philip Hossu\* and **Natalie Parde** (Aug. 2021). “Using Deep Learning to Correlate Reddit Posts with Economic Time Series During the COVID-19 Pandemic”. In: *Proceedings of the Third Workshop on Financial Technology and Natural Language Processing*. Online: Association for Computational Linguistics, pp. 8–14

## 2020

12. Philip Hossu\* and **Natalie Parde** (Dec. 2020). “UIC-NLP at SemEval-2020 Task 10: Exploring an Alternate Perspective on Evaluation”. In: *Proceedings of the Fourteenth Workshop on Semantic Evaluation*. Barcelona (online): International Committee for Computational Linguistics, pp. 1704–1709

## 2019

11. Flavio Di Palo\* and **Natalie Parde** (July 2019). “Enriching Neural Models with Targeted Features for Dementia Detection”. In: *Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics: Student Research Workshop*. Florence, Italy: Association for Computational Linguistics, pp. 302–308
10. Yatri Modi\* and **Natalie Parde** (June 2019). “The Steep Road to Happily Ever after: an Analysis of Current Visual Storytelling Models”. In: *Proceedings of the Second Workshop on Shortcomings in Vision and Language*. Minneapolis, Minnesota: Association for Computational Linguistics, pp. 47–57
9. **Natalie Parde** and Rodney D. Nielsen (May 2019). “User Perceptions of a Conversational Robot Interface”. In: *Proceedings of the CHI 2019 Workshop on Mapping Theoretical and Methodological Perspectives for Understanding Speech Interface Interactions (SpeechCHI 2019)*. Glasgow, United Kingdom

## 2018

8. Nabila Salma, Bin Mai, Kamesh Namuduri, Rasel Mamun, Yassir Hashem, Hassan Takabi, **Natalie Parde**, and Rodney Nielsen (Nov. 2018). “Using EEG Signal to Analyze IS Decision Making Cognitive Processes”. In: *Information Systems and Neuroscience*. Ed. by Fred D. Davis, René Riedl, Jan vom Brocke, Pierre-Majorique Léger, and Adriane B. Randolph. Cham: Springer International Publishing, pp. 211–218
7. **Natalie Parde** and Rodney Nielsen (June 2018). “Detecting Sarcasm is Extremely Easy ;-)”. In: *Proceedings of the Workshop on Computational Semantics beyond Events and Roles*. New Orleans, Louisiana: Association for Computational Linguistics, pp. 21–26
6. **Natalie Parde** (Feb. 2018). “Reading with Robots: Towards a Human-Robot Book Discussion System for Elderly Adults”. In: *Proceedings of the Thirty-Second AAAI Conference on Artificial Intelligence (AAAI 2018) Doctoral Consortium*. New Orleans, Louisiana

## 2017

5. Masoud Narouei, Hamed Khanpour, Hassan Takabi, **Natalie Parde**, and Rodney Nielsen (June 2017). “Towards a Top-down Policy Engineering Framework for Attribute-Based Access Control”. In: *Proceedings of the 22nd ACM on Symposium on Access Control Models and Technologies*. Indianapolis, Indiana, USA: Association for Computing Machinery, pp. 103–114

## 2015

4. **Natalie Parde**, Michalis Papakostas, Konstantinos Tsiakas, and Rodney D. Nielsen (Jan. 2015). ““Is It Rectangular?” Using I Spy as an Interactive, Game-Based Approach to Multimodal Robot Learning”. In: *Proceedings of the AAAI-15 Conference on Artificial Intelligence Student Program*. Austin, Texas
3. **Natalie Parde**, Michalis Papakostas, Konstantinos Tsiakas, Maria Dagioglou, Vangelis Karkaletsis, and Rodney D Nielsen (Jan. 2015). “I Spy: An interactive game-based approach to multimodal robot learning”. In: *Proceedings of the AAAI-15 Workshop on Knowledge, Skill, and Behavior Transfer in Autonomous Robots*

## 2014

2. **Natalie Parde** and Rodney D Nielsen (June 2014). “Design challenges and recommendations for multi-agent learning systems featuring teachable agents”. In: *Proceedings of the 2nd Annual Generalized Intelligent Framework for Tutoring (GIFT) Users Symposium (GIFTSym2)*. Pittsburgh, Pennsylvania, p. 147

## 2013

1. AnilKumar Sistla, **Natalie Parde**, Krunalkumar Patel, and Gayatri Mehta (May 2013). “Cross-Architectural Study of Custom Reconfigurable Devices Using Crowdsourcing”. In: *2013 IEEE International Symposium on Parallel Distributed Processing, Workshops and Phd Forum*. Cambridge, Massachusetts, pp. 222–230

## Other Miscellaneous Peer-Reviewed Publications and Presentations

### 2023

12. Mina Valizadeh\*, Vera Kaelin\*, Mary Khetani, and **Natalie Parde** (Oct. 2023). *Natural Language Processing to Classify Caregiver Strategies for Participation-Focused Pediatric Rehabilitation*. Abstract accepted for oral presentation at the American Congress of Rehabilitation Medicine Annual Conference. Atlanta, Georgia
11. Vivian C. Villegas, Dianna L. Bosak, Zurisadai Salgado, Michelle Phoenix, **Natalie Parde**, Rachel Teplicky, Mary A. Khetani, and High Value Early Intervention Research Group (2023). *Diversifying caregiver input to upgrade the Young Children’s Participation and Environment Measure (YC-PEM) for equitable pediatric re/habilitation practice*. Abstract accepted for presentation at the American Academy for Cerebral Palsy and Developmental Medicine Annual Meeting. Chicago, Illinois
10. Hope Sparks Lancaster, Shahla Farzana\*, Ryan Parks, Denis Fitzpatrick, Alicia Buttner, Seth Bashford, and **Natalie Parde** (Sept. 2023). *Associations between Speech and Language Performance in Adults*. Abstract accepted for poster presentation at the 2023 Convention of the Nebraska Speech-Language-Hearing Association. Lincoln, Nebraska

### 2022

9. Shahla Farzana\*, Ryan Parks, Emily Benck, **Natalie Parde**, Denis Fitzpatrick, Seth Bash, Mia Haschenburger, and Hope Sparks Lancaster (Nov. 2022). *Automated Scoring of Remotely Administered Irregular Word Spelling Task*. Abstract accepted for poster presentation at the 2022 American Speech-Language-Hearing Association Convention. Online
8. Vera Kaelin\*, Mina Valizadeh\*, Zurisadai Salgado, J.G. Sim, Dana Anaby, Andy Boyd, **Natalie Parde**, and Mary Khetani (May 2022a). *A Scoping Review of Participation as Operationalized in Pediatric Re/habilitation Research Using Artificial Intelligence*. Abstract accepted for oral presentation at the European Academy of Childhood Disability Conference. Online

7. Vera Kaelin\*, Mina Valizadeh\*, Zurisadai Salgado, J.G. Sim, Dana Anaby, Andy Boyd, **Natalie Parde**, and Mary Khetani (Mar. 2022b). *Participation as Operationalized in Pediatric Re/habilitation Research Using Artificial Intelligence: A Scoping Review*. Abstract accepted for oral presentation at the Australasia Academy of Cerebral Palsy and Developmental Medicine and Alliance of Academies of Childhood Disabilities Conference. Online
6. Parian Haghighat, Toan Nguyen, Mina Valizadeh\*, Mohammad Arvan\*, **Natalie Parde**, Myunghee Kim, and Heejin Jeong (2022). "Human Interaction with Intelligent Virtual Assistant in a Noisy Environment". In: *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* 66.1, pp. 1508–1508. eprint: <https://doi.org/10.1177/1071181322661264>

## 2021

5. Vera Kaelin\*, Mina Valizadeh\*, **Natalie Parde**, and Mary Khetani (Oct. 2021). *Artificial intelligence in rehabilitation targeting participation for young persons with disabilities: Gaps and opportunity*. Mini-symposium at the American Academy of Cerebral Palsy and Developmental Medicine Annual Meeting. Online
4. Vera Kaelin\*, Mina Valizadeh\*, Zurisadai Salgado, **Natalie Parde**, and Mary Khetani (Sept. 2021). *Artificial intelligence in participation-focused pediatric rehabilitation: A scoping review*. Abstract accepted for oral presentation at the American Congress of Rehabilitation Medicine Annual Conference. Online

## 2019

3. Shahla Farzana\* and **Natalie Parde** (May 2019). "Virtual-Interviewer: A Conversational Agent Designed to Facilitate Cognitive Health Screening in Older Adults". In: *Proceedings of the IEEE-EMBS International Conference on Biomedical and Health Informatics: Extended Abstracts (BHI 2019)*. Chicago, Illinois
2. Yatri Modi\* and **Natalie Parde** (May 2019). *Visual Storytelling: Errors and Improvements*. Abstract accepted for oral presentation at the 2019 Midwest Speech and Language Days (MSLD 2019). Chicago, Illinois

## 2017

1. **Natalie Parde** and Rodney D. Nielsen (Jan. 2017). *Reading with Robots: Towards an Intelligent Reading Companion that Promotes Cognitive Exercise in Older Adults*. Abstract accepted for poster presentation at the 2017 Dallas Aging and Cognition Conference. Dallas, Texas

## Additional Presentations (Not Peer-Reviewed)

- |      |  |
|------|--|
| 2016 | <b>Parde, Natalie</b> and Rodney D. Nielsen (Apr. 2016). <i>Getting to the Heart of Metaphors: Dependency-based Detection of Metaphoric Juxtapositions</i> . Poster at the 2016 CRA-Women Graduate Cohort Workshop. San Diego, California. |
| 2015 | <b>Parde, Natalie</b> and Rodney D. Nielsen (Apr. 2015). <i>An Exploration in Teaching Robots through "I Spy" Gameplay</i> . Poster at the 2015 CRA-Women Graduate Cohort Workshop. San Francisco, California.                             |
| 2014 | <b>Parde, Natalie</b> and Rodney D. Nielsen (Apr. 2014). <i>Improving Cognition in the Elderly via Dialogue-Based Games with Teachable Robot Agents</i> . Poster at the 2014 CRA-Women Graduate Cohort Workshop. Santa Clara, California.  |

## Invited Talks

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- **N. Parde**. Natural Language Processing for Healthcare Analysis, Assessment, and Intervention. Invited presentation and panel discussion at the *Health Data Science Consortium Seminar and Networking Series (NLP: From Theoretical Research to Health Sciences Applications)*. Chicago, Illinois, January 22, 2024.
- **N. Parde**. Sparking New Insights for Assessing Cognitive Health via Spoken Language. Invited presentation at the *Inaugural UIC SparkTalks Series*. Chicago, Illinois, November 16, 2023.
- **N. Parde**. Low-Resource Spoken Language Analysis for Cognitive Health Assessment. Invited presentation at the *UIC Department of Information and Decision Sciences Seminar*. Chicago, Illinois, September 22, 2023.

- **N. Parde.** Spoken Language Analysis for the Low-Resource, Interdisciplinary Task of Cognitive Health Assessment. Invited presentation at the *UChicago/TTIC Natural Language Processing Seminar Series*. Chicago, Illinois, May 26, 2023.
- V. Kaelin, M. Valizadeh, Z. Saldago, **N. Parde**, and M. Khetani. Artificial intelligence to customize participation-focused pediatric rehabilitation interventions. Invited presentation at the *Digital Health and Wellbeing Week*. Winchester, UK, March 20-24, 2023.
- **N. Parde.** The AI Doctor Is In: Towards Intelligent Automated Support for Healthcare Tasks using Natural Language Processing. Invited keynote at the *NLG4Health Workshop at the 15th International Natural Language Generation Conference*. Waterville, Maine, July 18, 2022.
- **N. Parde.** Inferring Missing EHR Variables from Clinical Notes to Facilitate Improved Understanding of Patient Health Equity. Invited presentation at the *Center for Computational Biotechnology and Genomic Medicine — Workshop on AI and Healthcare*. Virtual, November 11, 2021.
- **N. Parde.** The Doctor (or Chatbot?) Is In: Towards Automated Support for Healthcare Tasks using Natural Language Processing. Invited presentation at the *Tufts University Computer Science Colloquium Series*. Virtual, October 14, 2021.
- **N. Parde.** The Doctor (or Chatbot?) Is In: Towards Automated Support for Healthcare Tasks using Natural Language Processing. Invited presentation at the *DePaul University Computer Science Colloquium Series*. Virtual, October 1, 2021.
- **N. Parde.** The Doctor (or Chatbot?) Is In: Towards Automated Monitoring of Cognitive Health Status and Medical Self-Disclosure. Invited presentation at the *2020 Conference of the Chicago Chapter of the American Statistical Association (CCASA 2020)*. Virtual, November 20, 2020.
- **N. Parde.** Supporting Cognitive Wellness through Spoken Language Analysis. Invited presentation at the *Penn State University Joint CSE/IST Colloquium in Natural Language Processing*. Virtual, October 23, 2020.
- **N. Parde.** And, Action! Towards Leveraging Multimodal Patterns for Storytelling and Content Analysis. Invited keynote at the *2nd International Workshop on AI for Smart TV Content Production, Access and Delivery (AI4TV 2020)*. Virtual, October 12, 2020.
- **N. Parde.** Automatically Assessing Cognitive Health Using Verbal and Non-Verbal Cues. Invited presentation for the *UIC Data Science Lightning Talks* series. Virtual, August 7, 2020.
- **N. Parde.** An Introduction to the Deliciously Simple (#sarcasm) World of Computational Figurative Language Processing. Invited presentation at the *UIC Cognitive Psychology Brown Bag Series*. Chicago, Illinois, April 3, 2019.
- R. D. Nielsen and **N. Parde.** Perceptive Emotive Spoken-Dialogue Companion Robots. Invited presentation at the *2016 IEEE MetroCon Conference*. Arlington, Texas, October 26, 2016.

## Additional Training

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*Overview of Online Instruction*, Illinois Online Network (ION) Professional eLearning Program, 2020

*New Computing Faculty Workshop*, Computing Research Association, 2018

*Graduate Student Teaching Excellence Program*, University of North Texas, 2016

## Teaching Experience

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**UIC CS 521: Statistical Natural Language Processing**, Spring 2024

Class Size: 35 | Course Evaluation Responses:<sup>1</sup> 25

*Teaching Effectiveness*:  $4.84 \pm 0.47$  | *Overall Quality*:  $4.79 \pm 0.59$  | *Difficulty*:  $3.00 \pm 0.76$  | *Workload*:  $2.96 \pm 0.84$

**UIC CS 421: Natural Language Processing**, Fall 2023

Class Size: 48/40 (Undergrad/Grad) | Course Evaluation Responses: 21/28

*Teaching Effectiveness*:  $4.76/4.63 \pm 0.70/0.79$  | *Overall Quality*:  $4.76/4.59 \pm 0.70/0.80$  | *Difficulty*:  $3.24/2.89 \pm 0.94/1.19$  | *Workload*:  $2.81/3.11 \pm 0.98/1.01$

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<sup>1</sup>Scored using a Likert scale ranging from 1-5. For *Teaching Effectiveness* and *Overall Quality*, 1=Poor and 5=Excellent. For *Difficulty* and *Workload*, 1=Very Easy and 5=Very Hard.

### **UIC CS 521: Statistical Natural Language Processing, Spring 2023**

Class Size: 35 | Course Evaluation Responses: 17

Teaching Effectiveness:  $4.88 \pm 0.33$  | Overall Quality:  $4.88 \pm 0.49$  | Difficulty:  $3.06 \pm 0.90$  | Workload:  $3.00 \pm 0.94$

### **UIC CS 421: Natural Language Processing, Fall 2022**

Class Size: 38/26 (Undergrad/Grad) | Course Evaluation Responses: 19/15

Teaching Effectiveness:  $4.42/4.93 \pm 0.77/0.26$  | Overall Quality:  $4.72/5.00 \pm 0.57/0.00$  | Difficulty:  $2.63/3.00 \pm 0.90/1.00$   
| Workload:  $2.47/3.00 \pm 0.90/1.07$

### **UIC CS 521: Statistical Natural Language Processing, Spring 2022**

Class Size: 34 | Course Evaluation Responses: 24

Teaching Effectiveness:  $4.74 \pm 0.54$  | Overall Quality:  $4.7 \pm 0.56$  | Difficulty:  $3.13 \pm 0.92$  | Workload:  $3.17 \pm 0.83$

### **UIC CS 421: Natural Language Processing, Fall 2021<sup>2</sup>**

Class Size: 48/34 (Undergrad/Grad) | Course Evaluation Responses: 30/28

Teaching Effectiveness:  $4.6/4.79 \pm 0.5$  | Overall Quality:  $4.4/4.71 \pm 0.97/0.6$  | Difficulty:  $3.2/3.18 \pm 1.06/0.61$  | Workload:  $3.23/3.46 \pm 1.04/0.64$

### **UIC CS 521: Statistical Natural Language Processing, Spring 2021<sup>3</sup>**

Class Size: 34 | Course Evaluation Responses: 27

Teaching Effectiveness:  $4.78 \pm 0.42$  | Overall Quality:  $4.7 \pm 0.47$  | Difficulty:  $3.41 \pm 1.01$  | Workload:  $3.48 \pm 0.94$

### **UIC CS 421: Natural Language Processing, Fall 2020<sup>3</sup>**

Class Size: 47/24 (Undergrad/Grad) | Course Evaluation Responses: 26/20

Teaching Effectiveness:  $4.42/4.35 \pm 0.9/1.09$  | Overall Quality:  $4.35/4.35 \pm 1.06/1.14$  | Difficulty:  $3.46/3.15 \pm 1.07/0.88$   
| Workload:  $3.77/3.65 \pm 1.03/0.88$

### **UIC CS 521: Statistical Natural Language Processing, Spring 2020<sup>3</sup>**

Class Size: 18 | Course Evaluation Responses: 16

Teaching Effectiveness:  $4.81 \pm 0.40$  | Overall Quality:  $4.63 \pm 0.72$  | Difficulty:  $3.31 \pm 0.79$  | Workload:  $3.25 \pm 0.68$

### **UIC CS 421: Natural Language Processing, Fall 2019**

Class Size: 28/25 (Undergrad/Grad) | Course Evaluation Responses: 16/22

Teaching Effectiveness:  $4.5/4.36 \pm 0.82/0.85$  | Overall Quality:  $4.44/4.64 \pm 0.73/0.58$  | Difficulty:  $3.69/3.05 \pm 0.7/1.05$  |  
Workload:  $3.63/3.41 \pm 0.62/1.01$

### **UIC CS 594: Language and Vision, Spring 2019**

Class Size: 19 | Course Evaluation Responses: 17

Teaching Effectiveness:  $4.82 \pm 0.39$  | Overall Quality:  $4.71 \pm 0.47$  | Difficulty:  $3.41 \pm 0.51$  | Workload:  $3.53 \pm 0.51$

## **Guest Lectures and Educational Workshops**

- UIC CS 590: Research Methods in Computer Science
  - *Introduction to Natural Language Processing Research*, November 2023
- UIC Break Through Tech Summer Workshop Series
  - *How to Write a Research Paper*, July 2021
- UIC CS 100: Discovering Computer Science
  - *Tea Time: Q&A with Dr. Natalie Parde*, May 2020

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<sup>2</sup>Taught using a remote asynchronous format due to the COVID-19 pandemic.

<sup>3</sup>Switched to a remote synchronous format halfway through the semester due to the COVID-19 pandemic.

- UNT Graduate Research Grant Assistance Workshop
  - *Writing a Successful Proposal — How I Did It*, August 2018
- UNT (Frisco) CSCE 5300: Introduction to Big Data and Data Science
  - *Big Data and Data Science Overview*, March 2018
- UNT CSCE 4310/5210: Introduction to Artificial Intelligence
  - *Grounded Language Learning*, May 2018
  - *Figurative Language Processing + AAI Highlights*, February 2018
  - *Natural Language Processing*, March 2017
- UNT CSCE 1010: Discovering Computer Science
  - *Introduction to Robotics with NAO*, November 2015, April 2015, November 2014, and April 2014

## Additional Teaching Impact

- Educational videos about NLP topics have a combined 180,000+ views on YouTube (Link: [https://www.youtube.com/@NatalieParde\\_NLP](https://www.youtube.com/@NatalieParde_NLP))
- CS 421 used as a resource for faculty at Eastern Mediterranean University in Northern Cyprus
- CS 521 (Spring 2020) listed as a reference for CC6205 (Natural Language Processing) at Facultad de Ciencias Físicas y Matemáticas Universidad de Chile (Link: <https://github.com/dccuchile/CC6205>)
- CS 521 (Spring 2020) mentioned in the January 2020 issue of the NLP Newsletter (Link: <http://newsletter.rud.er.io/issues/nlp-progress-restrospectives-and-look-ahead-new-nlp-courses-independent-research-initiatives-interviews-lots-of-resources-217744>; 11.8k+ subscribers)
- CS 594 (Spring 2019) listed as a reference for CMP 722 (Advanced Computer Vision) at Hacettepe University (Link: <https://web.cs.hacettepe.edu.tr/~aykut/classes/spring2019/cmp722/>)
- CS 421 course materials incorporated into the curriculum for the NLP course at Telkom University

## Advising

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### Postdoctoral Mentoring

- Vera Kaelin (2023), *Senior Research Specialist*
  - Joint Appointment, *Computer Science* (PI Natalie Parde) and *Occupational Therapy* (PI Mary Khetani)

### Dissertation Chair

Active:

- Eli Whitehouse, *University of Illinois Chicago (UIC)*
- Gyeongeun Lee, *UIC*
- Pardis Ranjbar-Noiey, *UIC*
- Souvik Bhattacharya, *UIC*
- Usman Shahid, *UIC*

Alumni:

- Mohammad Arvan (Successfully Defended 4/22/2024), *UIC*
  - Recipient, 2020 Provost's Graduate Research Award
- Shahla Farzana (Successfully Defended 4/2/2024), *UIC*
- Ankit Aich (Successfully Defended 1/16/2024), *UIC*
- Mina Valizadeh (Successfully Defended 11/21/2022), *UIC*

### Masters Thesis Chair

Active:

- Sharad Chandakacherla, *University of Illinois Chicago (UIC)*
- Calliope Bandera, *UIC*
- Eleonora Quaranta, *UIC*

## Alumni:

- Souvik Bhattacharya (Successfully Defended 3/9/2023), *UIC*
  - Currently active as a PhD student
- Edoardo Stoppa (Successfully Defended 12/6/2022), *UIC*
- Yatri Modi (Successfully Defended 3/3/2020), *UIC*
- Alberto Bellini (Successfully Defended 12/13/2019), *UIC*
- Flavio Di Palo (Successfully Defended 12/12/2019), *UIC*

## Masters Project Chair

- Sarthak Jain (Summer 2024), *University of Illinois Chicago (UIC)*
- Mohan Dogra (Spring 2023), *UIC*
- Nitish Dewan (Spring 2023), *UIC*
- Sachin Parsa (Fall 2022), *UIC*
- Ashwin Deshpande (Spring 2022), *UIC*
- Charic Farinango Cuervo (Fall 2021), *UIC*
- Philip Hossu (Spring 2021), *UIC*

## WCP Chair<sup>4</sup>

- Yue Zhou (Spring 2023), *University of Illinois Chicago (UIC)*
- Anuja Tayal (Spring 2023), *UIC*
- Baris Karacan (Spring 2023), *UIC*
- Gyeongun Lee (Fall 2022), *UIC*
- Neil Thimmaiah (Fall 2022), *UIC*
- Zahra Rahimi Afzal (Spring 2022), *UIC*
- Jiangshu Du (Spring 2022), *UIC*
- Abari Bhattacharya (Fall 2021), *UIC*
- Tiberiu Sosea (Spring 2021), *UIC*
- Jishnu Ray Chowdhury (Fall 2020), *UIC*
- Seo Yeon Park (Spring 2020), *UIC*
- Mahshid Alsadat Hosseini (Spring 2020), *UIC*
- Hasti Sharifi (Fall 2019), *UIC*
- Yingjie Li (Spring 2019), *UIC*

## Dissertation Committees

### Active:

- Yue Zhou (Preliminary Exam: Spring 2024), *Computer Science, University of Illinois Chicago (UIC)*
- Hoang Nguyen (Preliminary Exam: Spring 2024), *Computer Science, UIC*
- Zhiming Zou (Preliminary Exam: Spring 2024), *Computer Science, UIC*
- Rochana Chaturvedi (Preliminary Exam: Spring 2024), *Computer Science, UIC*
- Xiaoxu Ding (Preliminary Exam: Spring 2023), *Rehabilitation Sciences, University of British Columbia*
- Tao Zhang (Preliminary Exam: Spring 2023), *Computer Science, UIC*
- Usama Muneeb (Preliminary Exam: Spring 2023), *Electrical and Computer Engineering, UIC*
- Natawut Monaikul (Preliminary Exam: Fall 2020), *Computer Science, UIC*

### Alumni:

- Mobashir Sadat (Successfully Defended 7/10/2024), *Computer Science, UIC*
- Jishnu Ray Chowdhury (Successfully Defended 6/18/2024), *Computer Science, UIC*
- Sarit Adhikari (Successfully Defended 6/18/2024), *Computer Science, UIC*

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<sup>4</sup>Written Critique and Presentation (WCP) is the formal name for UIC's Ph.D. qualifier examination. Advisors cannot serve as chairs for their own advisees, and at least one committee member must be from outside the student's primary research area.

- Ja Eun Yu (Successfully Defended 2/23/2024), *Computer Science, UIC*
- Tiberiu Sosea (Successfully Defended 5/8/2023), *Computer Science, UIC*
- Sepideh Esmailpourcharandabi (Successfully Defended 4/24/2023), *Computer Science, UIC*
- Vera Kaelin (Successfully Defended 10/25/2022), *Rehabilitation Sciences, UIC*
- Nianzu Ma (Successfully Defended 10/5/2022), *Computer Science, UIC*
- Krista Miller (Successfully Defended 6/27/2022), *Psychology, UIC*
- Abhinav Kumar (Successfully Defended 5/16/2022), *Computer Science, UIC*
- Yingjie Li (Successfully Defended 5/2/2022), *Computer Science, UIC*
- Jianguo Zhang (Successfully Defended 3/8/2022), *Computer Science, UIC*
- Congying Xia (Successfully Defended 12/1/2021), *Computer Science, UIC*
- Ye Liu (Successfully Defended 10/22/2021), *Computer Science, UIC*
- Shaika Chowdhury (Successfully Defended 10/19/2021), *Computer Science, UIC*
- Sahisnu Mazumder (Successfully Defended 10/18/2021), *Computer Science, UIC*
- Itika Gupta (Successfully Defended 4/14/2021), *Computer Science, UIC*
- Mehrnaz Najafi (Successfully Defended 2/22/2021), *Computer Science, UIC*
- Felix Pambuccian (Successfully Defended 2/18/2021), *Psychology, UIC*
- Mehrdad Alizadeh (Successfully Defended 5/22/2020), *Computer Science, UIC*
- Zainab Al-Qurashi (Successfully Defended 4/13/2020), *Computer Science, UIC*
- Lei Shu (Successfully Defended 2/10/2020), *Computer Science, UIC*
- Hu Xu (Successfully Defended 2/10/2020), *Computer Science, UIC*

### **Masters Thesis Committees**

- Susanna Olivero (Successfully Defended 3/11/2024), *Politecnico di Torino*
- Giuseppe Concialdi (Successfully Defended 6/15/2023), *University of Illinois Chicago (UIC)*
- Harsh Mishra (Successfully Defended 3/1/2023), *UIC*
- Tuhin Kundu (Successfully Defended 3/10/2021), *UIC*
- Maddalena Andreoli (Successfully Defended 5/8/2020), *UIC*
- Tejas Sarma (Successfully Defended 3/15/2019), *UIC*
- Shoaib Khan (Successfully Defended 3/12/2019), *UIC*
- Paolo Polimeno Camastra (Successfully Defended 12/11/2018), *UIC*

### **Masters Project Committees**

- Aldo Alvarez (Spring 2019), *University of Illinois Chicago (UIC)*
- Ashwani Khemani (Spring 2019), *UIC*
- Unaiza Faiz (Spring 2019), *UIC*

### **WCP Committees**

- Pardis Ranjbar-Noiey (Spring 2021), *University of Illinois Chicago (UIC)*
- Ankit Aich (Spring 2021), *UIC*
- Shahla Farzana (Fall 2020), *UIC*
- Mina Valizadeh (Spring 2020), *UIC*
- Mohammad Arvan (Spring 2020), *UIC*
- Neshat Mohammadi (Spring 2019), *UIC*

### **Additional Mentoring**

- Sahaja Peddaveerannagari (2024), *University of Illinois Chicago (UIC)*
- Meghan Guo (2023–Present), *UIC*
- Christina Wong (2023–Present), *UIC*
- Vaibhav Bhargava (2023–Present), *UIC*



- Maryam Katrawala (2023–2024), *UIC*
- Shayan Rasheed (2022–2023), *UIC*
- Devika Tiwari (2022–2023), *UIC*
- Xing Qian (2021–2022), *UIC*
- Danielle Cartagenes (2021–2022), *UIC*
- Megan Herrera (2020–2023), *UIC*
- Kirsten Heath (2021), Break Through Tech Scholar, *UIC*
- Bhavana Radharapu (2021), Break Through Tech Scholar, *UIC*
- Amratya Saraswat (2021), *UIC*
- Nimeesha Chan (2020–2021), *UIC*
- Brian Nguyen (2020), *UIC*
- Sylvia Joseph (2020), *UIC*
- Hajara-Yasmin Isa (2020), *UIC*
- Mariya Pasheva (2020), *UIC*
- Ivana Pavlovic (2019–2020), Early Research Scholars Program, *UIC*
- Jessica Borowy (2019–2020), Early Research Scholars Program, *UIC*
- Noemi Andras (2019–2020), Early Research Scholars Program, *UIC*
- Soyeon Lee (2019–2020), Early Research Scholars Program, *UIC*
- Cade Gordon (2019–2021), *Adlai E. Stevenson High School*
- Salma Kamni (2019), *Amos Alonzo Stagg High School*
- Yousef Ahmed (2019), *University of Illinois Urbana-Champaign*
- Ajata Reddy (2018–2019), *Texas Academy of Mathematics and Science (TAMS)*
- Henry Nguyen (2018-2019), *TAMS*
- John Long (2018), *TAMS*
- Skylar Werner (2018), *University of North Texas (UNT)*
- Philip Zeng (2018), *TAMS*
- Ryan Peterson (2017-2018), *TAMS*
- Hiram-Abi Yotchoum Nzia (2017-2018), *TAMS*
- Shelby Hobohm (2016-2017), *TAMS*
- Leanne Joseph (2016-2017), *TAMS*
- Soujanya Geddam (2016-2017), *TAMS*
- Yuri Castro (2016), *TAMS*
- Zaine Khoja (2016), *TAMS*
- Jacob Brunson (2015-2016), *TAMS*
- Sara Adams (2015-2016), *TAMS*
- Noelle Davis (2015-2016), *TAMS*
- Zhaochen Gu (2015-2016), *UNT*
- Adam Hair (2014-2015), *UNT*
- Keerat Baweja (2013-2015), *TAMS*

## Service

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### External Service

#### Organizer

- **Representations of the State of the World, Robot, and Human Interlocutor, and Building of Common Ground**, Session at the *Spoken Language Interaction with Virtual Agents and Robots (SLIVAR)* Meeting Series, 2022

#### Session Chair

- **Applications Involving LRs and Evaluation IV**, Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING), 2024

- **Computational Social Science and Cultural Analytics**, Annual Conference of the Association for Computational Linguistics (ACL), 2023
- **Ethics + Computational Social Science and Cultural Analytics**, Conference on Empirical Methods in Natural Language Processing (EMNLP), 2022
- **Social Media Processing**, Conference on Language Resources and Evaluation (LREC), 2022
- **Birds of a Feather (Language Grounding to Vision, Robotics, and Beyond)**, Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL), 2021
- **Birds of a Feather (NLP Applications)**, Annual Conference of the Association for Computational Linguistics (ACL), 2020
- **Midwest Speech and Language Days**, 2019

#### Area Chair

- **Social Media Processing**, Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING), 2024
- **NLP Applications**, Conference on Empirical Methods in Natural Language Processing (EMNLP), 2023
- **Dialogue and Interactive Systems**, Annual Meeting of the Association for Computational Linguistics (ACL), 2023
- **Ethics and NLP**, Conference on Empirical Methods in Natural Language Processing (EMNLP), 2022

#### Action Editor

- **ACL Rolling Review**, 2024–Present

#### Guest Editor

- **Computer Speech & Language**, Special issue on *Explainability, AI literacy, and language development*, 2023

#### Mentoring

- **Open Mentoring Session**, Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL), 2021
- **Group Mentor: Navigating Research Problems in NLP**, Annual Conference of the Association for Computational Linguistics (ACL), 2020
- **Mentoring Committee**, ACL Student Research Workshop, 2020

#### Funding Agency Panelist/Reviewer

- National Science Foundation, 2024
- National Science Foundation, 2022
- National Science Foundation, 2021
- National Science Foundation, 2020
- National Science Foundation, 2019

#### Program Committees

- (ACL 2019–2024) Annual Meeting of the Association for Computational Linguistics
- (EMNLP 2019–2023) Conference on Empirical Methods in Natural Language Processing
- (NAACL 2021; 2019) Conference of the North American Chapter of the Association for Computational Linguistics
- (EACL 2021) Annual Meeting of the European Chapter of the Association for Computational Linguistics
- (AAAI 2021) Association for the Advancement of Artificial Intelligence, *Senior Program Committee*
- (IJCAI 2022; 2021) International Joint Conferences on Artificial Intelligence, *Senior Program Committee (2021)*
- (LREC 2022; 2020) Language Resources and Evaluation Conference
- (SpLU-RobNLP 2024; 2021; 2019) Combined Workshop on Spatial Language Understanding & Grounded Communication for Robotics

- (HumEval 2023) Workshop on Human Evaluation of NLP Systems
- (SemEval 2022) International Workshop on Semantic Evaluation
- (ACL SRW 2020) ACL 2020 Student Research Workshop
- (CoRL 2019) Conference on Robot Learning
- (AAMAS 2019) International Conference on Autonomous Agents and Multiagent Systems
- (LDK 2019) Conference on Language, Data and Knowledge

### Journal Reviewing

- Computer Speech & Language, 2021
- Neurocomputing, 2019

### Additional Reviewing

- (ACL RR 2021–Present) ACL Rolling Review
- (CHI 2019) ACM CHI Conference on Human Factors in Computing Systems

### Outreach Programming

- **Application Reviewer**, NCWIT Aspirations in Computing Award, 2017, 2015
- **Activity Instructor**, Design Your World STEM Conference for Girls, November 2017, April 2016, March 2015
- **Student Group Leader**, Design Your World STEM Conference for Girls, April 2017
- **Panelist**, NCWIT Aspirations in Computing Ceremony, February 2016
- **Presenter**, NCWIT Aspirations in Computing Ceremony, February 2015

### Additional Volunteering

- (EMNLP 2017) Conference on Empirical Methods in Natural Language Processing
- (IJCAI 2015) International Joint Conference on Artificial Intelligence

### Internal Service

*University of Illinois Chicago*

### University Service

- Faculty Senate (2023–Present)<sup>5</sup>

### Departmental Committee Memberships

- Undergraduate Committee (2020–Present)
- CS Advisory Committee (2021–2022)<sup>6</sup>
- Graduate Admissions Committee (Spring 2021)
- NSF Broadening Participation in Computing Committee (2020)

### Other Committee Memberships

- Search Committee (External Member): Tenure-Track Assistant Professor in Computational Language Science, *Department of Linguistics* (2022–2023)
- Search Committee (External Member): Tenure-Track Assistant Professor in Technology, Information Literacy and Wellbeing, *Department of Communication* (2021–2022)

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<sup>5</sup>Committee membership involves a nomination and election process.

## Outreach Programming

- **Presenter**, Introduction to Data Science Workshop, Fall 2023, Spring 2022, Fall 2021
- **Invited Speaker**, GradSWE Women's Empowerment Series, Spring 2022
- **Panelist**, *Women in Academia Panel* at WiCS Women in Tech Week, Spring 2021
- **Mentor**, exploreCSR Problem Solving and Research Workshop, Spring 2021, Spring 2020
- **Team Leader**, UIC Women in CS Scavenger Hunt, Fall 2020, Fall 2019
- **Interviewer**, College of Engineering Women's Scholarship Program, Spring 2020, Spring 2019
- **Panelist**, exploreCSR Problem Solving and Research Workshop, Fall 2019
- **Faculty Chaperone**, Grace Hopper Celebration of Women in Computing, Fall 2019

## Miscellaneous

- **Faculty Fellow**, Honors College, Fall 2020–Present
- **Computer Science Marshal**, UIC Commencement Ceremony, Spring 2019
- **Proposal Reviewer**, Discovery Partners Institute (DPI) Seed Funding Cycle 1 Program, Winter 2018/19

## *University of North Texas*

### Outreach Programming

- **Activity Leader**, STEM Academy Middle School Summer Camp, July 2018, July 2017, July 2016
- **Activity Leader**, UNT Engineering REAL Community, October 2015

### Miscellaneous

- **Site Facilitator**, North American Computational Linguistics Olympiad, 2018, 2017, 2016, 2014
- **Judge**, UNT Showcase of Undergraduate Research in Engineering, Fall 2013
- **Engineering Ambassador**, UNT College of Engineering, 2012-2013

### Miscellaneous

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**Member**, Association for Computing Machinery

**Member**, Association for Computational Linguistics

**Former President**, UNT Women in Computing