## Natalie Parde

University of North Texas
Department of Computer Science and Engineering
Discovery Park, 940 N. Elm St.
Denton, Texas 76207

natalieparde@my.unt.edu www.natalieparde.com

## Education

## University of North Texas

Ph.D., Computer Science and Engineering, Anticipated 2018.

M.S., Computer Science, 2016. 4.0/4.0.

B.S., Computer Science, 2013. Summa Cum Laude.

## Research

## Human Intelligence and Language Technologies Laboratory

Department of Computer Science and Engineering, University of North Texas

Graduate Research Assistant, August 2013–Present

Undergraduate Research Assistant, June 2013-August 2013

## Software and Knowledge Engineering Laboratory

Institute of Informatics and Telecommunications, N.C.S.R. Demokritos, Greece Visiting Researcher, July 2014

## Reconfigurable Computing Laboratory

Department of Electrical Engineering, University of North Texas Undergraduate Research Assistant, August 2012–May 2013

## Summer Undergraduate Program in Engineering Research (SUPER)

College of Engineering, University of North Texas Research Assistant, June 2012–August 2012

# Awards and Fellowships

## National Science Foundation Graduate Research Fellowship

National Science Foundation, 2014

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

## **EMNLP Student Scholarship**

Special Interest Group on Linguistic Data and Corpus-based Approaches to NLP, 2017

## Dr. Hermann Zemlicka Award for Most Visionary Paper

Gmunden Retreat on NeuroIS, 2017

Grace Hopper Scholarship, Google, 2017

Awards and Fellowships

Toulouse Graduate School Travel Grant, University of North Texas, 2017

College of Engineering Travel Grants, University of North Texas, 2017, 2014

Golden Eagle Award, University of North Texas, 2016

**Departmental Travel Awards**, Dept. of Computer Science and Engineering University of North Texas, 2016, 2015, 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, 2014

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

People's Choice Project Award, IRSS, 2014

Graduate Assistantship Tuition Scholarship, University of North Texas, 2013

Academic Achievement Scholarship, University of North Texas, 2013

Honors Scholar Award, UNT Honors College, 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

N. Parde and R. D. Nielsen. A Corpus of Metaphor Novelty Scores for Syntactically-Related Word Pairs. To appear in the *Proceedings of the 11th International Conference on Language Resources and Evaluation (LREC 2018)*. Miyazaki, Japan, May 7-12, 2018.

<u>N. Parde</u> and R. D. Nielsen. Exploring the Terrain of Metaphor Novelty: A Regression-based Approach for Automatically Scoring Metaphors. To appear in *Proceedings of the Thirty-Second AAAI Conference on Artificial Intelligence (AAAI-18)*. New Orleans, Louisiana, February 2-7, 2018.

## **Publications**

- N. Parde. Reading with Robots: Towards a Human-Robot Book Discussion System for Elderly Adults. To appear in *Proceedings of the Thirty-Second AAAI Conference on Artificial Intelligence (AAAI-18) Doctoral Consortium*. New Orleans, Louisiana, February 2-7, 2018.
- N. Parde and R. D. Nielsen. Finding Patterns in Noisy Crowds: Regression-based Annotation Aggregation for Crowdsourced Data. In *Proceedings of the Conference on Empirical Methods in Natural Language Processing (EMNLP 2017)*. Copenhagen, Denmark, September 7-11, 2017.
- N. Salma, B. Mai, K. Namuduri, R. Mamun, Y. Hashem, H. Takabi, <u>N. Parde</u>, and R. Nielsen. Using EEG Signal to Analyze IS Decision Making Cognitive Processes. In Information Systems and Neuroscience, Lecture Notes in Information Systems and Organisation.
- M. Narouei, H. Khanpour, H. Takabi, R. Nielsen and <u>N. Parde</u>. Towards a Top-down Policy Engineering Framework for Attribute-based Access Control. In *Proceedings of the 22nd ACM Symposium on Access Control Models and Technologies*. Indianapolis, Indiana, June 21-23, 2017.
- <u>N. Parde</u> and R. D. Nielsen. #SarcasmDetection is soooo general! Towards a Domain-Independent Approach for Detecting Sarcasm. In *Proceedings of the 30th International FLAIRS Conference*. Marco Island, Florida, May 22-24, 2017.
- N. Parde, A. Hair, M. Papakostas, K. Tsiakas, M. Dagioglou, V. Karkaletsis, and R. D. Nielsen. Grounding the Meaning of Words through Vision and Interactive Gameplay. In *Proceedings of the 2015 International Joint Conference on Artificial Intelligence (IJCAI 2015)*, Buenos Aires, Argentina, July 25-31, 2015.
- M. Papakostas, K. Tsiakas, N. Parde, V. Karkaletsis, and F. Makedon. An Interactive Framework for Learning User-Object Associations through Human-Robot Interaction. In *Proceedings of the 8th International Conference on PErvasive Technologies Related to Assistive Environments*, Corfu, Greece, July 1-3, 2015.
- N. Parde, M. Papakostas, K. Tsiakas, and R. D. Nielsen. "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, January 25-30, 2015.
- N. Parde, M. Papakostas, K. Tsiakas, M. Dagioglou, V. Karkaletsis, and R. D. Nielsen. 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*, Austin, Texas, January 25, 2015.
- N. Parde and R. D. Nielsen. Design Challenges and Recommendations for Multi-Agent Learning Systems Featuring Teachable Agents. In *Proceedings of the 2nd Annual GIFT Users Symposium (GIFTSym2)*. Pittsburgh, Pennsylvania, June 12-13, 2014

## **Publications**

- G. Mehta, K. K. Patel, N. Parde, and N.S. Pollard. "Data-driven mapping using local patterns." IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems 32.11 (2013): 1668-1681.
- G. Mehta, C. Crawford, X. Luo, <u>N. Parde</u>, K. Patel, B. Rodgers, A. Sistla, A.Yadav, and M. Reisner. (2013). UNTANGLED A game environment for discovery of creative mapping strategies. In ACM Transactions on Reconfigurable Technology and Systems, Vol. 6, No.3
- G. Mehta, X. Luo, N. Parde, K. Patel, B. Rodgers, and A. K. Sistla. UNTAN-GLED An interactive mapping game for engineering education. In *Proceedings of 2013 IEEE International Conference on Microelectronic Systems Education (MSE)*, Austin, Texas, 2013.
- A. Sistla, N. Parde, K. Patel, and G. Mehta. Cross-architectural study of custom reconfigurable devices using crowdsourcing. In *Proceedings of the 2013 IEEE 27th International Symposium on Parallel and Distributed Processing Workshops and PhD Forum (IPDPSW '13)*, Boston, Massachusetts, May 20-24, 2013.

## Other Presentations

- N. Parde and R. D. Nielsen. Reading with Robots: Towards an Intelligent Reading Companion that Promotes Cognitive Exercise in Older Adults. Poster at the 2017 Dallas Aging and Cognition Conference. Dallas, Texas, January 29-30, 2017.
- R. D. Nielsen and <u>N. Parde</u>. Perceptive Emotive Spoken-Dialogue Companion Robots. Presentation at the 2016 IEEE MetroCon Conference. Arlington, Texas, October 26, 2016.
- N. Parde and R. D. Nielsen. Getting to the Heart of Metaphors: Dependency-based Detection of Metaphoric Juxtapositions. Poster at the 2016 CRA-Women Graduate Cohort Workshop. San Diego, California, April 15-16, 2016.
- N. Parde and R. D. Nielsen. An Exploration in Teaching Robots through "I Spy" Gameplay. Poster at the 2015 CRA-Women Graduate Cohort Workshop. San Francisco, California, April 10-11, 2015.
- N. Parde and R. D. Nielsen. Improving Cognition in the Elderly via Dialogue-Based Games with Teachable Robot Agents. Poster at the 2014 CRA-Women Graduate Cohort Workshop. Santa Clara, California, April 11-12, 2014.

## Teaching and Service Work

## Site Facilitator

North American Computational Linguistics Olympiad March 2018, January 2018, January 2017, March 2016, January 2016, January 2014

## **Application Reviewer**

NCWIT Aspirations in Computing Award December 2017, December 2015

## Teaching and Activity Instructor Service Work

Design Your World STEM Conference for Girls November 2017, April 2016, March 2015

#### Volunteer

**EMNLP** Conference September 2017

## **Activity Leader**

STEM Academy Summer Camp July 2017, July 2016

## Student Group Leader

Design Your World STEM Conference for Girls **April** 2017

## **Guest Lecturer**

UNT CSCE 4310/5210

Topic: Natural Language Processing

March 2017

## **Panelist**

NCWIT Aspirations in Computing Ceremony February 2016

## Guest Lecturer, UNT CSCE 1010

Topic: Introduction to Robotics with NAO

November 2015, April 2015, November 2014, April 2014

## **Activity Leader**

UNT Engineering REAL Community October 2015

## Volunteer

IJCAI Conference July 2015

## Presenter

NCWIT Aspirations in Computing Ceremony February 2015

## Judge

UNT Showcase of Undergraduate Research in Engineering September 2013

## **Engineering Ambassador**

UNT College of Engineering September 2012 - May 2013

Affiliations President, UNT Women in Computing

Member, UNT Chapter, Association for Computing Machinery

Member, Association for Computational Linguistics

Member, Association for the Advancement of Artificial Intelligence

Students Mentored Keerat Baweja

Texas Academy of Mathematics and Science (TAMS) student, 2013-2015

Adam Hair, University of North Texas (UNT) student, 2014-2015

Jacob Brunson, TAMS student, 2015-2016

Sara Adams, TAMS student, 2015-2016

Noelle Davis, TAMS student, 2015-2016

Zhaochen Gu, UNT student, 2015-2016

Shelby Hobohm, TAMS student, 2016-2017

Leanne Joseph, TAMS student, 2016-2017

Yuri Castro, TAMS student, 2016

Soujanya Geddam, TAMS student, 2016-2017

Zaine Khoja, TAMS student, 2016

Ryan Peterson, TAMS student, 2017-Present

Huram-Abi Yotchoum Nzia, TAMS student, 2017-Present

John Long, TAMS student, 2018-Present

Skylar Werner, UNT student, 2018-Present

Philip Zeng, TAMS student, 2018-Present

Henry Nguyen, TAMS student, 2018-Present