# computational linguist

1401 Marie Mount Hall, College Park, MD 20742 linkedin: linkedin.com/in/phonologist

crhenry@umd.edu website: cassidyhenry.com

### **EDUCATION**

University of Maryland, College Park (UMD)

Linguistics, PhD Program

University of California, Los Angeles (UCLA)

Linguistics with a Specialization in Computing, B.A.

College of the Canyons (COC)

UCLA Transfer Alliance Program (TAP), Honors Program

Kazan National Research Technological University

National Security Language Initiative for Youth Program - Russian Summer

August 2018-May 2023

College Park, MD

June 2015-June 2018

Los Angeles, CA

August 2013-June 2015
Santa Clarita, CA

June 2012-August 2012

Kazan, Tatarstan, RU

## **PROFESSIONAL EXPERIENCE**

U.S. Army Research Laboratory, West

SMART Scholarship Fellow in computational linguistics

June 2016 - Present

Playa Vista, CA

**Freelance Self Employment** 

January 2009 - Present

Project-based work across my various skill sets, including but not limited to: software development, digital art, graphic design, web design, branding, software quality assurance, game development and design, translations, and more.

## **PRESENTATIONS AND PUBLICATIONS**

authorship bolded, if multi-author work

"Balancing Efficiency and Coverage in Human-Robot Dialogue Collection" Matthew Marge, Claire Bonial, Stephanie Lukin, Cory Hayes, Ashley Foots, Ron Artstein, Cassidy Henry, Kimberly Pollard, Carla Gordon, Felix Gervits, Anton Leuski, Susan Hill, Clare Voss and David Traum at the Interactive Learning for Artificial Intelligence for Human-Robot Interaction (AI-HRI) 2018 Symposium, part of the AAAI Fall Symposium Series. Arlington, VA, 18-20 October 2018.

"Consequences and Causes of Stylistic Differences in Human-Robot Dialogue" Stephanie Lukin, Kimberly Pollard, Claire Bonial, Matthew Marge, Cassidy Henry, Ron Artstein, David Traum and Clare Voss at the Special Interest Group on Discourse and Dialogue (SIGDial) Melbourne, Australia. 12-14 July, 2018.

**"Faster Pace in Human-Robot Dialogue Leads to Fewer Dialogue Overlaps" Cassidy Henry,** Carla Gordon, David Traum, Stephanie Lukin, Kimberly A. Pollard, Ron Artstein, Claire Bonial, Clare Voss, Ashley Foots and Matthew Marge at Widening Natural Language Processing (WiNLP), co-located with NAACL-HLT 2018, New Orleans, LA. 1 June 2018.

**"The Bot Language Project: Moving Towards Natural Dialogue with Robots" Cassidy Henry,** Stephanie Lukin, Kimberly A. Pollard, Claire Bonial, Ashley Foots, Ron Artstein, Clare R. Voss, David Traum, Matthew Marge, Cory J. Hayes, Susan G. Hill at the Southern California Natural Language Processing Symposium (SoCal NLP) Irvine, CA. 6 April, 2018.

- "Human-Robot Dialogue and Collaboration in Search and Navigation" Claire Bonial, Stephanie M. Lukin, Ashley Foots, Cassidy Henry, Matthew Marge, Kimberly A. Pollard, Ron Artstein, David Traum, Clare R. Voss at the 2018 Annotation, Recognition, and Evaluation of Actions Workshop (AREA 2018). Miyazaki, Japan. 7 May, 2018.
- **"Dialogue Structure Annotation for Multi-Floor Interaction"** David Traum, **Cassidy Henry**, Stephanie Lukin, Ron Artstein, Felix Gervits, Kimberly Pollard, Claire Bonial, Su Lei, Clare Voss, Matthew Marge, Cory Hayes, and Susan Hill. at the 11<sup>th</sup> Edition of the Languages Resources and Evaluation Conference (LREC). Miyazaki, Japan. 7-12 May, 2018.
- "An Optimality Theoretic Analysis of Vowel Harmony in Kazan Tatar" at the 92<sup>nd</sup> Annual Meeting of the Linguistic Society of America (LSA), 2018. Salt Lake City, UT. 4-7 January, 2018.
- "Laying Down the Yellow Brick Road: Development of a Wizard-of-Oz Interface for Collecting Human-Robot Dialogue" Claire Bonial, Matthew Marge, Ron Artstein, Ashley Foots, Felix Gervits, Cory J. Hayes, Cassidy Henry, Susan G. Hill, Anton Leuski, Stephanie M. Lukin, Pooja Moolchani, Kimberly A. Pollard, David Traum, and Clare R. Voss. at the Symposium on Natural Communication for Human-Robot Collaboration -- AAAI Fall Symposium Series 2017. Arlington, VA. 9-11 November, 2017.
- "Towards Efficient Human-Robot Dialogue Collection: Moving Fido Into the Virtual World" Cassidy Henry, Pooja Moolchandani, Kimberly Pollard, Claire Bonial, Ashley Foots, Cory Hayes, Ron Artstein, Clare Voss, David Traum and Matthew Marge. at the Women and Underrepresented Minorities in Natural Language Processing (WiNLP) Workshop at ACL. Vancouver, BC. 30 July 2017; also previously presented at Southern California Robotics Symposium 2017. Los Angeles, CA. 14 April 2017.
  - **Published in ARL Technical report**: "2017 ARL Summer Student Program, Volume II: Compendium of Abstracts" ARL-SR-0388. Dec 2017.
- **"Exploring Variation of Natural Human Commands to a Robot in a Collaborative Navigation Task"** Matthew Marge, Claire Bonial, Ashley Foots, Cory Hayes, **Cassidy Henry**, Kimberly A. Pollard, Ron Artstein, Clare R. Voss, and David Traum. *In Proceedings of the First Workshop on Language Grounding for Robotics (RoboNLP). Vancouver, BC. 3 August 2017.*
- **"Vowel Harmony in Kazan Tatar"** Presented at University of California Undergraduate Conference on Slavic and East/Central European Studies. Los Angeles, CA. 29 April 2017.
- **"Towards Natural Dialogue with Robots: Bot Language"** Matthew Marge, Claire Bonial, Kimberly A. Pollard, **Cassidy Henry**, Ron Artstein, Brendan Byrne, Susan G. Hill, Clare Voss, and David Traum. *Presented at Artificial Intelligence for Human-Robot Interaction (AI-HRI)* 2016. *Arlington*, VA. 17-19 November 2016.
- "If I Only Had a Brain": Automation of Dialogue Management in a Wizard-of-Oz Experiment Setup" presented at the Young Researchers Roundtable for Spoken Dialogue Systems (YRRSDS). Los Angeles, CA. 16-18 September 2016.
- "Can I call you Fido?': Exploring Affect in Human Robot Interaction in a Collaborative Environment" at the ARL Student Summer Symposium 2016. Adelphi, MD. 11 August 2016.
  - Abstract published: "Volume II: Compendium of Abstracts", By ARL Summer Student Research Symposium" ARL-TM2016a. Jun 2017.

## **AWARDS AND HONORS**

### Science, Mathematics, and Research for Transformation (SMART) Scholarship

Undergraduate May 2017 Graduate April 2018

The SMART Scholarship is a highly competitive full funding opportunity offered by the U.S. Department of Defense to increase the number of scientists working on research problems relevant to DoD goals at their research facilities.

#### National Security Language Initiative for Youth (NSLI-Y) Scholarship

June 2012

I participated in the National Security Language Initiative for Youth Program in June-August 2012 to study Russian in Kazan, Tatarstan in the Russian Federation. NSLI-Y is a prestigious and selective critical language scholarship and immersion program awarded by the U.S. Department of State to address critical language deficits among our nation's youth. I was highly successful on the program and developed increased language skills and cultural appreciation.

#### Top Undergraduate Presentation by a Summer Intern - ARL West

August 2016

My talk based on my summer research at ARL West titled " 'Can I call you Fido?': Exploring Affect in Human Robot Interaction in a Collaborative Environment" was selected as the top undergraduate presentation at ARL West. As a result, I was awarded a trip to present my research and proudly represent ARL West at ARL's Adelphi Laboratory Center in Maryland at the Summer Student Symposium on August 11, 2016.

#### Invited Panel Speaker at ARL Open Campus Open House

November 2016

I was invited by the Director of ARL West (Cynthia Bedell) to be a part of the "ARL25: Working Together for the Next 25" panel at the U.S. Army Research Laboratory's Open Campus Open House in Adelphi, MD on 17 November 2016.

#### Army Educational Outreach Program (AEOP) Technical Symposia Travel Award

**July 2017** 

Army Educational Outreach Program (AEOP) awarded me travel funding to attend the Women and Underrepresented Minorities in Natural Language Processing Workshop as well as the Association for Computational Linguistics Annual Meeting 2017 to present my ARL Research.

#### **COC Honors Banquet Ceremony Speaker 2015**

June 2015

I was invited by the Honors Program at College of the Canyons to speak about my personal educational journey and academic philosophy before departing to transfer to UCLA.

#### COC Honors Award in Anthropology 2014

**June 2014** 

I was nominated for an award by the College of the Canyons Honors Program for my academic achievement in my Honors Anthropology courses.

James F. Swift Scholarship of the Scranton Area Foundation \$16,000

June 2013

Le Roy E. and Helen Hackworth Scholarship - \$5,000

June 2016

Nancy Diane Orford Scholarship \$1,200

**July 2015** 

# **PROJECTS**

#### Towards Natural Dialogue with Robots: Bot Language

June 2016-Present

Project Lead: Dr. Matthew Marge (ARL-CISD), mentored by Dr. Kimberly Pollard (ARL-HRED)

### **Modeling Tatar Intonational Phonology**

September 2017-June 2018

Project Lead: Adam Royer and Dr. Sun-Ah Jun (UCLA Linguistics)

A Corpus of Spoken Tatar

July 2017-Present

Cassidy Rae Henry 3

## **CONFERENCE INVOLVEMENT / ORGANIZATION**

#### Diversity & Inclusion Committee Member - NAACL

2018-Present

I provide perspectives on disability and gender identity related concerns for the organizers of the North American Chapter of the Association for Computational Linguistics (NAACL) conference.

### Lead Organizer - Southern California Undergraduate Linguistics Conference (SCULC) 2016, 2018

SCULC, an entirely student-run, free conference, was established to create a collaborative and educational environment for the undergraduate linguistics community.

#### **Student Volunteer at Conferences:**

Association for Computational Linguistics (ACL) 2017 Annual Meeting – Vancouver, BC, Canada Special Interest Group on Discourse and Dialogue (SIGdial) 2016 – Los Angeles, CA International Conference on Intelligent Virtual Agents (IVA) 2016 – Los Angeles, CA

### **VOLUNTEER EXPERIENCE**

#### **Board Member of the Bruin Linguists Society**

August 2015 - June 2018

Bruin Linguists Society (BLing) is UCLA's undergraduate linguistics society. We hold social, professional, academic, networking, research-related, and various other types of events for our members. As a board member, I am responsible for organizing meetings, conferences, events, and administrative tasks.

## Interviewer for NSLI-Y and YES Abroad Program

September 2013-Present

I interview youth who are applying for the NSLI-Y and YES Abroad Scholarships from the U.S. Department of State each application cycle, as well as serve as a representative from the program to them and their families.

#### College of the Canyons Honors Steering Committee Member

March 2015-June 2015

I represented the "student voice" on the committee. We met on a regular basis to discuss events the happenings, changes, and regulations of the College Honors program, as well as the UCLA Transfer Admission Program in conjunction with the Honors Program.

**NSLI-Y Alumni Representative – West Coast** 

December 2015 - December 2016

# **PROFESSIONAL MEMBERSHIPS**

Member, Linguistic Society of America; Member, Association of Computational Linguistics; Alumni, U.S. Dept of State International Exchange Alumni

## **LANGUAGES**

Russian - ACTFL Oral Proficiency Exam: Intermediate High Japanese - Intermediate Tatar - Beginner

## **RESEARCH INTERESTS**

Computational Linguistics, Phonetics, Phonology, Prosody, Intonational Phonology, Affective Computing, Tatar Linguistics, Corpus Linguistics, Machine Learning, Artificial Intelligence