

ALVIN GRISSOM II

Associate Professor of Computer Science, Haverford College

+1.972 · 310 · 4057 ◇ agrissom@haverford.edu

DEGREES

Ph.D., Computer Science	2017
University of Colorado Boulder	<i>Boulder, Colorado, USA</i>
<i>Thesis: Incremental Prediction and Decision-making for Simultaneous Machine Translation</i>	
Advisor: Jordan Boyd-Graber	
M.S., Computer Science	2009
Emory University	<i>Atlanta, Georgia, USA</i>
<i>Thesis: Sentiment in Japanese: A Corpus-based Approach with Sociolinguistic Implications</i>	
Advisor: Eugene Agichtein	
B.A., Computer Science, Mathematics Minor	2006
Hendrix College	<i>Conway, Arkansas, USA</i>
Certificate, Asian Studies	2004
Kansai Gaidai University	<i>Hirakata City, Japan</i>

ACADEMIC APPOINTMENTS

Haverford College	July 2020-Present
<i>Associate Professor of Computer Science (Tenured), 2024-Present</i>	
<i>Haverford, PA, USA</i>	
Assistant Professor of Computer Science, 2020-2023	
Visiting Scholar, University of Tokyo, 8/2023-7/2024	
Ursinus College	August 2017 - May 2020
<i>Assistant Professor of Computer Science</i>	
<i>Collegeville, PA, USA</i>	

PEER-REVIEWED PUBLICATIONS

Haverford students marked with *.

Other undergraduate students marked with **.

Rapidly Piloting Real-time Linguistic Assistance for Simultaneous Interpreters with Untrained Bilingual Surrogates

2024

LREC-COLING

Turin, Italy

Alvin Grissom II, Jo Shoemaker, Benjamin Goldman*, Ruikang Shi*, Craig Stewart, C. Anton Rytting, Leah Findlater and Jordan Boyd-Graber

Rare but Severe Errors Induced by Minimal Deletion: An Empirical Study on Chinese and English

2022

COLING (31% acceptance rate)

Gyeongju, South Korea

Ruikang Shi*, Alvin Grissom II, and Duc Minh Trinh*

An Attentive Recurrent Model for Incremental Prediction of Sentence-final Verbs 2020
Findings of EMNLP

Wenyan Li, [Alvin Grissom II](#), and Jordan Boyd-Graber

Investigating Sports Commentator Bias within a Large Corpus of American Football Broadcasts 2019

EMNLP (20.5% acceptance rate)

Hong Kong

Jack Merullo**, Luke Yeh**, Abram Handler, [Alvin Grissom II](#), Brendan O'Connor, and Mohit Iyyer

Gower as Data: Exploring the Application of Machine Learning to Gower's Middle English Corpus 2019

Accessus 5(2), 8

Kara L. McShane and [Alvin Grissom II](#)

Pathologies of Neural Models Make Interpretation Difficult 2018

EMNLP (25% acceptance rate)

Brussels

Shi Feng, Eric Wallace**, [Alvin Grissom II](#), Mohit Iyyer, Pedro Rodriguez, and Jordan Boyd-Graber

Substring Frequency Features for Segmentation of Japanese Katakana Words with Unlabeled Corpora 2017

IJCNLP (31% accepted)

Taipei

Yoshinari Fujinuma and [Alvin Grissom II](#)

Incremental Prediction of Sentence-final Verbs: Humans versus Machines 2016

CoNLL (20% acceptance rate)

Berlin

[Alvin Grissom II](#), Naho Orita, and Jordan Boyd-Graber

Syntax-based Reordering for Simultaneous Machine Translation 2015

EMNLP (24% acceptance rate)

Lisbon

He He, [Alvin Grissom II](#), Jordan Boyd-Graber, and Hal Daumé III

Don't Until the Final Verb Wait: Reinforcement Learning for Simultaneous Machine Translation 2014

EMNLP (30% acceptance rate)

Doha

[Alvin Grissom II](#), He He, Jordan Boyd-Graber, John Morgan, and Hal Daumé III

Annotating Factive Verbs 2012

LREC

Istanbul

[Alvin Grissom II](#) and Yusuke Miyao

WORKSHOPS WITH STUDENT WORK

Denoising word embeddings for post-processing gender bias mitigation 2023

Mid-Atlantic Student Colloquium on Speech, Language and Learning (MASC-SLL) Washington, DC

Catherine Lin* (Bryn Mawr, presenter) and [Alvin Grissom II](#)

Assessing the Ability of Neural Machine Translation Models to Perform Syntactic Rewriting 2019

Workshop on Widening NLP (WiNLP@ACL)

Florence, Italy

Jahkel Robin**, [Alvin Grissom II](#), and Matthew Roselli**

Assessing the Ability of Neural Machine Translation Models to Perform Syntactic Rewriting

2017

Black in AI@NeurIPS

Long Beach, CA, USA

Jahkel Robin** (presenter) and Alvin Grissom II

BOOK CHAPTERS

Inclusion in Linguistics

Edited by Anne H. Charity Hudley, Christine Mallinson, and Mary Bucholtz

Oxford University Press

2024

Power Shift: Towards Inclusive Natural Language Processing, Emily M. Bender and Alvin Grissom II

GRANTS

\$296,325 National Science Foundation EAGER: DCL: SaTC: Enabling Interdisciplinary Collaboration: Evaluating Bias In The Creation and Perception of GAN-Generated Faces (2022-2024), PI with Ryan Lei

Mozilla Responsible Computing Grant (2021) (with others)

\$5500 Pennsylvania Consortium for the Liberal Arts (PCLA) Opportunity Grant (2017)

\$150 Amazon EC2 Credit Course Grant (2017)

\$600 Google Cloud Credit Course Grant (2017, 2018, 2019)

\$1000 Ursinus Small Research Grant (2017, 2018, 2019)

NVIDIA GPU Seed Grant (2017, 1 Titan XP GPU)

TEACHING

Haverford College

Assistant (2020-2024)/Associate Professor of Computer Science

July 2020-Present
Haverford, PA, USA

CMSC H260 Foundations of Data Science (F-22)

CMSC 360 Machine Learning (S-22, S-23)

CMSC/LING 325 Computational Linguistics (F-20, F-21)

Independent Study: Machine Translation (S-23)

Ursinus College

Assistant Professor of Computer Science (Tenure-track)

August 2017 - May 2020
Collegeville, PA, USA

CS-173 Introduction to Computer Science (F-17)

CS-477 Artificial Intelligence (F-17, F-19)

CS-174 Object-Oriented Programming (S-18, S-19, S-20)

CS-474 Human-Computer Interaction (S-18, S-20)

CS-471 CS Seminar: Deep Computer Vision and Language (F-18)

CS-373 Theory of Computation (F-18)

CS-374 Principles of Programming Languages (S-19)

CS 371W Data Structures and Algorithms (S-19, S-20)

Independent Research (F-18, S-18, F-19, S-19)

Independent Study: Computational Linguistics (S-18, S-19, S-20)

University of Colorado <i>Instructor of Record, Special Topics: Machine Learning</i>	August 2016 - December 2016 <i>Boulder, CO, USA</i>
Primary instructor for machine learning course for undergraduates, requiring adaptation of fast-paced graduate course.	
University of Colorado <i>Teaching Assistant, Computer Science I</i>	August 2014 - December 2014 <i>Boulder, CO, USA</i>
Responsible for four recitations per week, or approximately 100 students. Graded held office hours, and tutored students, and planned curricula.	
Duke University Talent Identification Program <i>Instructor, Web Application Development</i>	June 2010 - July 2010 <i>San Antonio, TX, USA</i>
Created and taught summer course for middle and high school students to learn computer programming and web development.	
Emory University <i>Teaching Assistant, Computer Science I</i>	September 2008 - May 2009 <i>Atlanta, GA, USA</i>
Held office hours and graded assignments introductory computer science course.	
Duke University Talent Identification Program <i>Instructor, Computer Programming</i>	June 2008 - July 2008 <i>College Station, TX, USA</i>
Designed and taught two summer sessions for high school students to learn computer science concepts and programming. Was asked to return.	
Hendrix College <i>Tutor, Math Help Center</i>	August 2003 - May 2006 <i>Conway, AR, USA</i>
Held weekly paid office hours to help calculus and pre-calculus students. Graded assignments.	
Hendrix College <i>Volunteer Tutor, Menifee School District</i>	September 2002 - May 2003 <i>Menifee, AR, USA</i>
Volunteered to tutor grade school students weekly in nearby school district.	

CURRICULUM DEVELOPMENT

Haverford College <i>Co-developed new gateway course on Foundations of Data Science</i>	2021
First taught in Fall 2022.	
Haverford College <i>Designed new course on computational linguistics, adapted to online setting during pandemic</i>	2020
Created extensive lecture notes and assignments for course.	
Ursinus College <i>Special Topics: Deep Computer Vision and Language</i>	2018
Designed special topics course on deep learning for undergraduates with no background in the subject.	
Ursinus College <i>Other Courses</i>	2017-2020

Created new curriculum/assignments for introductory computer science, Data Structures and Algorithms, Artificial Intelligence, Human-Computer Interaction, and Principles of Programming Languages. Incorporated issues of ethics into HCI, AI, and Algorithms courses.

Ursinus College 2018

Digital Humanities Python Workshop

Designed and led one-day Python programming workshop for humanities faculty.

University of Colorado Boulder 2016

Special Topics: Machine Learning

Designed undergraduate machine learning course.

University of Maryland, College Park 2013

“Winter Storm” workshop

Planning Committee

Designed and led week-long workshop (“Computational Linguistics for Everyone”) designed for people with potentially no background in computational linguistics.

Designed and ran week-long Python course for language scientists at student-run workshop.

Gave lecture on machine translation to high school students.

Duke University Talent Identification Program 2010

Computer Programming

Designed and ran programming curriculum for summer program for “gifted” students.

Duke University Talent Identification Program 2008

Web Application Development

Designed programming curriculum for summer program for “gifted” students.

GUEST LECTURES

Tufts University 2022, 2023

Introduction to Cognitive and Brain Science (PSY 9)

Introduction to Natural Language Processing (March, 2022)

Computational Linguistics and Large Language Models (March, 2023)

University of Maryland, College Park 2014

Computational Linguistics I

· Introduction to Formal Semantics

University of Maryland, College Park 2014

Computational Linguistics I

Viterbi Algorithm

Emory University 2008

The Web

CSS and Javascript

ACADEMIC ADVISING

Pre-major advisees

Haverford College

2022-2023: Will Cope, Bella Gattsuo, Ben Jiang, Emely Polanco

2021-2022: Kayla Patton, Xavier DeVore, Ankith Suhas Pinnamaneni, Dylan Soemitro, Alexander Reichard, Isaac Wasserman, Jade Rousseau

Major advisees

Haverford College

Class of 2024: Joel Torres, Michael Rabayda, Oluwaseun Eisape

Class of 2023: Sharon Wang, Laney Modlin

BACHELOR'S THESIS ADVISING

Haverford College

Haverford, PA, USA

2022-2023

Caroline Gihlström, Topic on Large Language Models and Linguistics (title hidden while paper under anonymous peer review)

Ryan Trotter, Evaluating the Effect of Training Data Bias on Generative Adversarial Networks

Bailey Lin, Inductive Biases in Generative Adversarial Networks

Catherine Lin (Bryn Mawr), Denoising word embeddings for post-processing gender bias mitigation

Keith Mburu, Joint Learning to Improve Generalization: Automatic Music Transcription and Music Source Separation (Lit. Review)

Jordan Shand, Game Theoretical Investigation into Convergence Instability of Generative Adversarial Nets (Lit. Review)

Zach Crampton, The Application of Reinforcement Learning for National Football League Sports Gambling (Lit. Review)

Albert Dahlberg, The Propagation of Media in Text (Lit. Review)

2021-2022

Duc Trinh, Negation Learning in Transformer-based Machine Translation Models, with Jane Chandlee

Carter Langen, Analyzing the Aeneid and its Translations with Topic Models and Word Embeddings

Simon Babb, Word Order in Machine Translation

William Harris-Braun, Augmenting Neural Machine Translation Training Data for Low-resource Languages with Morphological Transducers (Lit. Review)

Asia Belt, Racial Bias in NLP Models (Lit. Review)

2020-2021

Benjamin Goldman, Verb Prediction in Japanese with Transformers

Ruikang Shi, Hallucinations in Machine Translation

Blien Habtu, 1-D TV: A Computational Investigation into the Lexical Representation of Black Womanhood In Reality Television News

Amberley Su (Bryn Mawr), Improving Sentence-final Verb Prediction in Japanese using Recurrent Neural Networks and Sentence Shuffling

Tomas Paris, Learning Hierarchical Structure in LSTMs (Lit. Review)

OTHER WORK EXPERIENCE

IBM Research–Tokyo

February 2016 - July 2016

*Intern**Tokyo, Japan*

Researched incremental question answering and performed software engineering tasks.

National Institute of Informatics

June 2013 - August 2013

*Research Intern**Tokyo, Japan*

Researched final verb prediction in Japanese using statistical language models.

National Institute of Informatics

May 2011 - August 2011

*Research Intern**Tokyo, Japan*

Researched textual entailment.

Oak Ridge National Laboratory

June 2012 - August 2012

*Summer Intern**Oak Ridge, TN, USA*

Worked on natural language processing-related projects.

Securboracion

November 2011 - May 2012

*Software Engineer**Washington, DC*

Worked on natural language processing-related projects.

University of Arizona

April 2010 - December 2010

*Software Developer/Consultant**Tucson, AZ, USA Remote*

Mobile programmer for psychology research project

Emory University

February 2010 - March 2010

*Software Developer/Consultant**Atlanta, GA, USA*

Mobile programmer for psychology research project

Axiom Corporation

June 2006 - June 2007

*Software Developer**Little Rock, AR, USA*

Software developer for user interfaces group.

Duoshare Software

May 2004 - August 2004

*Software Developer Intern**Dallas, TX, USA*

Software developer intern, working on multilingualization of point-of-sale software.

INVITED TALKS (NON-CONFERENCE)

University of Pennsylvania Center for Outreach, Research, and Education (MindCORE)

March, 2022

*Invited Talk**Philadelphia, PA, USA*

Incremental Language Processing and What We Can Learn from Errors in NLP Models

George Mason University Information Science

September, 2021

*Invited Talk**Fairfax, VA, USA*

Examining Racial Bias in Sports Commentary

University of Maryland, College Park CLIP Lab

Invited Talk (Virtual)

Examining Racial Bias in Sports Commentary

March, 2021
College Park, MD, USA

University of Washington

Invited Talk (Virtual)

Examining Racial Bias in Sports Commentary

December, 2020
Seattle, Washington, USA

Seoul National University Linguistics

Invited Talk (Virtual)

Introspection: Examining Pathologies of Neural NLP Models and Racial Bias in Sports Commentary

August, 2020
Seoul, South Korea

Tufts University Cognitive and Brain Science Colloquium

Invited Talk

Bias and Beyond: AI in the Service of Power

March, 2020
Boston, MA, USA

Widening NLP (WiNLP) Workshop 2019 @ ACL

Keynote

How NLP is Used to Serve Power: Current and Future Trends

July, 2019
Florence, Italy

University of Tokyo

Invited Talk

How NLP is Used to Serve Power: Current and Future Trends

July, 2019
Tokyo, Japan

Black in AI Workshop 2018

Pathologies of Neural Models Make Interpretations Difficult

Oral presentation

December 2018
Montreal, BC, Canada

Harvey Mudd College

Invited Talk

Reinforcement Learning for Simultaneous Machine Translation

February, 2018
Claremont, California, USA

University of Aizu

Invited Talk

Reinforcement Learning and Verb Prediction for Simultaneous Machine Translation

August 2018
Aizuwakamatsu, Japan

University of Pennsylvania

Invited Talk

· Reinforcement Learning and Verb Prediction for Simultaneous Machine Translation

October 2017
Philadelphia, PA, USA

Google Japan

Reinforcement Learning and Verb Prediction for Simultaneous Machine Translation

Machine Translation Group

July 2016
Tokyo, Japan

National Institute of Informatics

Reinforcement Learning and Verb Prediction for Simultaneous Machine Translation

Miayo Lab

July 2016
Tokyo, Japan

Nara Institute of Technology

Reinforcement Learning and Verb Prediction for Simultaneous Machine Translation

June 2016
Nara, Japan

Augmented Human Communication Lab

Kyoto University

Incremental Prediction of Sentence-final Verbs

Kurohashi-Kawahara Lab

June 2016

Kyoto, Japan

UNIVERSITY AND DEPARTMENTAL SERVICE

Haverford College

2022-

Honors Committee

College-wide committee for awarding of honors to seniors.

Haverford College

2022, 2023

Visiting Assistant Professor Search Committee

Co-chair of Computer Science visitor search.

Haverford College

2021

Chief Diversity Officer's IDEAs Council

Work on diversity and inclusion issues and initiatives for the college.

Haverford College

2020-Present

CS Department Study Abroad Coordinator

Manage the logistics of study abroad, especially determining the appropriate requirements transferred courses can fill.

Haverford College

2021-

Pre-major advising

Advising of first-year prospective computer science majors.

Haverford College

2022-

Major advising

Advising of computer science majors.

Ursinus College

2018-2020

Digital Liberal Arts Working Group

This committee promoted digital liberal arts initiatives across campus, including designing a Digital Liberal Arts minor.

Ursinus College

2018-2020

Information Technology Committee

This committee considers plans for the selection and implementation of technology across campus.

Ursinus College

2018-2020

Major Advising

Computer Science major advising

University of Colorado Graduate Committee

2016-2017

Graduate Student Representative

The Grad Comm reviews all applications to the department and handles petitions from students, as well as curriculum and event planning.

University of Maryland “Winter Storm” Planning Committee

2014

Committee Member

Planned and took part in language science workshop

Created hour-long lecture on machine translation for high school students.

Created and taught multi-day Python workshop for language scientists.

Hendrix College

2002-2003

Volunteer Tutor

Volunteered to tutor grad school students in nearby small town on a weekly basis.

PROFESSIONAL SERVICE

- NeurIPS 2023; EMNLP 2020, 2023; NAACL 2021 Ethics Committee
- ACL Rolling Review Reviewer (2022)
- ACL 2021 Diversity and Inclusion Sociocultural Inclusion Chair
- NAACL 2021 Teaching NLP Workshop 2021 Program Committee
- ACL 2021 Area Chair (Ethics in NLP, NLP for Good)
- CoNLL 2020, Area Chair (Multilinguality and Machine Translation)
- Workshop on Automatic Simultaneous Translation (AutoSimTrans) 2020 Program Committee
- EMNLP 2019, 2020 Program Committee
- EACL 2021 Program Committee
- ICLR AI for Social Good Workshop 2019, Area Chair
- AAAI 2019 Reviewer
- NAACL 2020-2021 Program Committee
- ACL 2019 Program Committee
- NAACL 2018, 2019 Student Research Workshop, Program committee
- COLING 2018, Area chair
- Black in AI Workshop 2017-2020 Program Committee
- CoNLL 2017-2019, 2021 Program Committee
- ACL 2017, 2018 Student Research Workshop Committee, Mentor
- Computer Speech and Language, Reviewer (2017)
- Language Resources and Evaluation, Reviewer (2017)
- ACL 2013, Associate Reviewer

JOURNALISTIC AND OTHER MEDIA APPEARANCES

Carnegie Mellon University Consequential Podcast

2020

Interview: Language, Power, and NLP

The Telegraph: Inside Google’s struggle to control its ‘racist’ and ‘sexist’ AI <i>Quoted in article</i>	2020
IEEE Spectrum: Microsofts AI Research Draws Controversy Over Possible Disinformation Use <i>Quoted in article</i>	2019
The Undefeated: Can artificial intelligence help us understand racial bias in sports? <i>Sports article about EMNLP paper</i>	2019
This Week in Machine Learning Podcast <i>Interview: Pathologies of Neural Models and Interpretability</i>	2018

FELLOWSHIPS AND SCHOLARSHIPS

NSF IGERT Language Science Fellowship <i>University of Maryland, College Park</i> Cross-disciplinary fellowship where I took part in language science-related research and activities.	2013-2014
GEM Fellowship <i>GEM Foundation</i> Private tuition fellowship and internship	2012-2013
Tuition Scholarship <i>Emory University</i> Partial tuition scholarship for MS in computer science	2007-2009
Chairman’s Scholarship <i>Hendrix College</i> Partial tuition scholarship for undergraduate studies.	2002-2006

AWARDS

Arkansas Undergraduate Mathematics Competition <i>First Place Team</i> Top ranking team for solving a series of theoretical mathematics problems under time constraints.	2006
Arkansas Undergraduate Mathematics Competition <i>Third Place Team</i> Third place team for solving a series of programming problems under time constraints.	2005
Axiom Programming Contest <i>Second Place Team</i> Second place team for solving a series of programming problems under time constraints.	2005
Pi Mu Epsilon <i>Member</i> National Mathematics Honor’s Society	2003-2006

LANGUAGES

English (native), Japanese (advanced), Mandarin Chinese (basic)