Katherine (Katie) Stasaski
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Education

University of California, Berkeley Ph.D. Student, Fall 2016-present
EECS Ph.D. Student in area of NLP and Education. GPA: 4.0
Research Advisor: Marti Hearst.

The George Washington University Bachelor of Science, Summa Cum Laude, Spring 2016
Computer Science Major, Minored in Political Science and Logic. GPA: 3.925
Research Advisor: Rahul Simha.

Publications

Stasaski, Katherine, Manav Rathod, Tony Tu, Yunfang Xiao, and Marti A. Hearst, Automatically Generating Cause-and Effect Questions from Passages, *BEA Workshop, EACL 2021*.

Stasaski, Katherine and Vikram Ramanarayanan. "Automatic Feedback Generation for Dialog-Based Language Tutors Using Transformer Models and Active Learning." *Human-in-the-Loop Dialogue Systems Workshop, NeurIPS* 2020.

Stasaski, Katherine, Grace Hui Yang, and Marti A. Hearst. "More Diverse Dialogue Datasets via Diversity-Informed Data Collection." *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics. 2020.*

Stasaski, Katherine, Kimberly Kao, and Marti A. Hearst. "CIMA: A Large Open Access Dialogue Dataset for Tutoring." *BEA Workshop, ACL*. 2020.

Stasaski, Katherine and Marti A. Hearst, Multiple Choice Question Generation Utilizing an Ontology, *BEA Workshop, EMNLP*
2017.

Selected Awards

- National Science Foundation (NSF) Graduate Research Fellow, awarded March 2017.
- Allen Institute for Artificial Intelligence Key Scientific Challenges Grant Award ($10,000), January 2018.
- Chancellor's Fellowship, U.C. Berkeley Fellowship awarded to applicants who also advance the Regents' goals for diversity, August 2016.
- EECS Excellence Award, UC Berkeley departmental supplemental fellowship awarded to applicants who excel in computer science, August 2016
- CRA-W Graduate Cohort Scholarship, April 2017.
- Anita Borg Institute Grace Hopper Conference Scholar, awarded scholarship to attend the Grace Hopper Conference for Women in Computing, October 2016
- Norman B. Ames Award, awarded to one GWU graduating senior in the School of Engineering for their significant contributions to students, the School of Engineering, and the GW community, May 2016
- Distinguished Scholar Award, awarded to one GWU graduating senior in the School of Engineering for excellence in academics, May 2016
- Shelly and Steve Heller Award, for excellence in Computer Science as a sophomore woman, May 2014

Research Experience

UC Berkeley EECS *Ph.D. Student Researcher* Aug 2016-present

- Researcher supervised by Dr. Marti Hearst. Interested broadly in the intersection of NLP and Education.
- Working on dialogue-based intelligent tutoring system grounded in an image. Our goal is to have an agent which tailors dialogue responses conditioned on a student to produce pedagogically good tutoring responses.
- Previously worked on deep neural system to automatically generate personalized math explanations for intelligent tutoring system and system which automatically generated multiple choice science questions from an ontology.

Educational Testing Service *NLP Research Intern* July 2020-Aug 2020

- Supervised by Vikram Ramanarayanan.
- Worked on human-in-the-loop system to provide natural language feedback on the pragmatic appropriateness of a language learner's dialogic speech. Trained transformer models to produce this feedback and iteratively updated models based on expert-annotated corrections.

Allen Institute for Artificial Intelligence *Research Intern* May 2018-Aug 2018

- Supervised by Mark Hopkins and Ronan LeBras on the Euclid team.
- Worked on linguistic coordination in math and science word problems. Collected data for coordination distribution task. For an input of a complex sentence, trained models to predict either (1) the simple sentences formed by distributing the conjunct or (2) a declaration that distribution would change the semantic meaning of the distributed sentences.

GWU School of Engineering *Undergraduate Research Fellow* May 2014-May 2016

- Researcher for the Learning Education Technology Research Group under Dr. Rahul Simha.
- Created algorithms, back-end system, and mobile application for adult learners of different literacy levels. Contributed to educational system which aims to provide illiterate adults with automatically generated reading exercises on a smartphone application. Helped test system's user design and effectiveness on students at the Washington Literacy Center.
- Individual research contributions include: An algorithm to intelligently misspell English words and ranks generated results based on probability of occurrence in the English language and an algorithm that automatically generates factual comprehension questions from a given reading passage.

Academic Service

- Reviewer, EMNLP 2021
- Reviewer, NAACL 2021
- Reviewer, ACL 2020, 2021
- Reviewer, CHI 2021
- PC Member, SIGIR Industry Track 2020

Poster Presentations, Competitions, and Invited Talks

AWS re:Invent AI Summit (demo)- *Tutoring via Grounded Dialogue.* Katherine Stasaski, Kimberly Kao, Kevin Lu, Kiran Giresh, Marti Hearst. November 2018.

Bay Area Learning Analytics Conference (poster)- *Science Question Generation via an Ontology.* Katherine Stasaski and Marti Hearst. February 2018.

GW Undergraduate Research Days Showcase- 1st Place Mathematics and Statistics Division and 2nd Place Nashman Research Award for Projects which Impact Society. *CAPITAL Words: Algorithmic Generation of Reading and Spelling Exercises for Low Literacy Users.* Katherine Stasaski, Elsbeth Turcan, Jennifer Hill, Rahul Simha. April 2016.

GW School of Engineering and Applied Science Research Showcase- 1st Place Undergraduate Research Award. *CAPITAL Words: Algorithmic Generation of Reading and Spelling Exercises for Low Literacy Users.* Katherine Stasaski, Elsbeth Turcan, Jennifer Hill, Rahul Simha. February 2016.

GW Undergraduate Research Days Showcase- 1st Place Science Division. *CAPITAL: Creating Automated Pronunciation Instructional Tools for Adult Learners.* Katherine Stasaski, Elsbeth Turcan, Malcolm Goldiner, Jennifer Hill, Rahul Simha. April 2015.

22nd Annual GENI Conference Student Research Competition- 3rd Place. *CSCI 6907: Advanced Networks System Programming GENI Projects.* Eric Armbrust, Lucas Chaufournier, Joel Klein, Guyue Liu, Phil Lopreiato, Yuxin Ren, Neel Shah, Katie Stasaski, Wei Zhang, Tim Wood. March 2015.

GW School of Engineering and Applied Science Research Showcase- Semi-Finalist. *Creating Automated Instructional Tools for Adult Literacy Education.* Jennifer Hill, Katherine Stasaski, Rahul Simha. February 2015.

Siemen's GW Undergraduate Research Showcase. *CAPITAL: Comprehension and Pronunciation Instructional Tools for Adult Learners.* Katherine Stasaski, Jennifer Hill, Rahul Simha. November 2014,

Teaching Experience

UC Berkeley *Graduate Student Instructor* January 2020-May 2020, January 2021-May 2021
- Undergraduate and Graduate Natural Language Processing course. Facilitated course content creation (homeworks, quizzes, exams), held office hours, and led online student discussion. Guest lectured on Dialogue System.

GWU School of Engineering *Tutor* August 2015-May 2016
- Tutored students individually and held weekly group sessions for computer science and calculus courses.

GWU School of Engineering *Undergraduate Teaching Fellow* August 2015-December 2015
- Facilitated weekly tutoring and review sessions for freshman, sophomore, and junior computer science students.

GWU School of Engineering *Course Grader* August 2015-December 2015
- Evaluated weekly problem sets and projects for junior-level algorithms course.

GWU School of Engineering *Undergraduate Learning Assistant* August 2014-December 2014
- Attended undergraduate labs for Software Engineering course and assisted students with material presented and assignments given in the lab. Held additional tutoring sessions for students outside of class.

Work Experience

Educational Testing Service *NLP Research Intern* July 2020-August 2020

- Worked on human-in-the-loop feedback system for dialogic speech. Worked in NLP Speech team and mentored by Vikram Ramanarayanan.

Allen Institute for Artificial Intellgience *Research Intern* May 2018-August 2018
- Worked on linguistic coordination project with the Euclid math problem solving team. Mentored by Mark Hopkins and Ronan LeBras.

Salesforce *Software Engineering Intern* May 2016-August 2016
- Worked on project which took production data about organizations' data, clustered them in an unsupervised manor with respect to data types and characteristics, and recreated data in performance test environment.

Intuit, Inc. *Software Engineering Intern* May 2015-August 2015
- Implemented RESTful end to end services used in Intuit's professional tax software to convert files to a proprietary format. Integrated Intuit's collaboration platform (Link) into the professional tax group's flagship offering.

Administrative Office of the United States Courts *Information Technology Intern* January 2014-May 2014
- Responsible for installing, configuring and upgrading software and hardware on laptops.

BlackBerry, Inc. *BlackBerry Software Tester Intern* May 2013-August 2013
- Tested multiple BlackBerry devices and logged any errors found with the software.

Technical Skills

Python, Pytorch, Tensorflow, Keras, Java, C, SQL, Coq, Android, Play Framework, Linux, Agile

Extra-Curricular Activities and Leadership Roles

- EECS Peers CS Coordinator—run student organization aimed at providing peer support among EECS graduate students. Coordinated office hours for members of organization so graduate students can attend and receive support for issues they have. (August 2020-present)
- Berkeley AI Research Group Mentor—Mentoring an undergraduate student from an underrepresented minority group who is interested in AI research. Meet with mentee monthly and provide school and research advice. (Fall 2017-present)
- Berkeley Women in Computer Science and Engineering Mentor (Fall 2017-present)—Mentor first year graduate student. Meet occasionally throughout the semester.
- Berkeley Women in Computer Science and Engineering Member (Fall 2016-present) – Member of club and participated in undergraduate outreach events, such as a workshop which provided undergraduate CS women the opportunity to ask questions about applying to graduate school and receive feedbacks on application materials.
- Berkeley Institute of Design Social Chair (Fall 2016-present) – In charge of planning social gatherings, hackathons, and community building events for our lab. Runs the Facebook page's communications about our weekly seminars and special lectures to facilitate engagement between the greater Berkeley community and the lab.
- Informally have mentored 4 undergraduate students on my graduate research project (Spring 2017-present).
- GWU Association for Computing Machinery President (Spring 2015-May 2016) and Events Coordinator (Fall 2014-Spring 2015). In charge of orchestrating professional, social, and academic events for computer science students. Hosted events to facilitate bonding between students of all class years as well as building a community among faculty and CS students.
- George Washington University Policy Debate Team President (Fall 2015-May 2016) and Member (Fall 2012-May 2016). In charge of leading team meetings and organizing tournament travel. Participated in policy, British

parliamentary, and civic debate tournaments. Organized tournaments in partnership with the Higher Education Department of the French Embassy in the United States, the German Embassy in the United States, and NASA.

- School of Engineering and Applied Science Student Peer Advisory Network Mentor (Spring 2015-May 2016). Mentored incoming freshmen engineering students. Attended camping getaway to welcome freshmen to GW and form an Engineering Community. Orchestrated monthly activities for mentees throughout school year.
- GWU Women in Computer Science Club (Fall 2012-May 2016). Participated in monthly brown bag lunches and mentorship program by mentoring a specified freshman woman in computer science.
- Tau Beta Pi Engineering Honors Society Member (Fall 2013-May 2016)