Abigail See

https://cs.stanford.edu/people/abisee/

EDUCATION

Stanford University, CA Sep 2015 — Aug 2021

· PhD in Computer Science, advised by Prof. Christopher Manning
· Research interests: Understanding and improving Deep Learning techniques for open-ended text generation, e.g. story generation and chitchat dialogue

University of Cambridge, Queens' College, UK Sep 2010 — June 2014

· Master of Mathematics (Distinction). Essay: *Smoothed Analysis with Applications in Machine Learning*
· BA in Mathematics: First Class honours in first year; Upper Second in second and third years

RESEARCH AND WORK EXPERIENCE

Co-Leader – Stanford Alexa Prize Team Sep 2019 – June 2020
Advised by Christopher Manning

· Managed a team of 9 students to build an open-domain socialbot, Chirpy Cardinal, from scratch.
· Won 2nd place and a $100,000 prize. As a first-time team, we beat teams competing for the third time.

Research Intern – Facebook AI Research, NYC June 2018 – Sep 2018
Advised by Jason Weston, Douwe Kiela

· Evaluated methods to control multiple aspects of generated text in a sequence-to-sequence model.
· Applied to a chitchat dialogue setting and showed that by controlling certain important attributes, we can create a chatbot that is more engaging for humans.

Research Intern – Google Brain, Mountain View, CA June 2016 – Sep 2016
Advised by Peter Liu

· Developed the pointer-generator neural architecture to improve the reliability of sequence-to-sequence models for long-document text summarization.
· Designed an interactive tool to visualize neural models with attention.

Research Intern – Microsoft Research Cambridge, UK June 2013 – Sep 2013
Adivsed by Yoram Bachrach, Pushmeet Kohli

· Investigated the role of compatibility in Weighted Voting Games (a game theory voting system).
· Derived complexity proofs, and produced simulation-based empirical results.

Research Intern – Microsoft Research Cambridge, UK June 2012 – Sep 2012
Advised by Byron Cook

· Worked on Terminator, an automatic termination analysis tool.
· Implemented a faster and more comprehensive proof strategy based on lexicographic ranking functions.

TEACHING AND OUTREACH

Co-Instructor and Head TA – CS224N (NLP with Deep Learning) Winter 2018 & 2019

· Worked with instructors Richard Socher (2018) and Christopher Manning (2019) to plan syllabus, deliver lectures, organize guest lectures, design new assignments and code, and collect feedback.
· Managed a team of 20 TAs to support 470 students.

· Won awards (Centennial TA Award, Forsythe Teaching Award) for contributions to the class.
· Assisted the Center of Professional Development to produce XCS224N, an online version of the course.

Organizer and Moderator – AI Salon, Stanford AI Lab   Sep 2017 – June 2018
· Organized and moderated discussions on high-level issues in AI, often featuring prominent expert guests.
· Moderated a debate between Christopher Manning and Yann LeCun, available on YouTube.

Organizer – AI Women, Stanford AI Lab   Sep 2017 – June 2018
· Organized the community inclusivity group, hosting meetups for socializing and discussion.

Research Mentor – Stanford AI4ALL Summer School   June 2017
· Designed and taught a two-week NLP project for high school girls.

Lead Mentor – Girls Teaching Girls To Code, Stanford   Summer 2016 & 2017
· Designed and taught an interactive coding session to teach AI concepts to high school girls.

Volunteer Maths Tutor – Action Tutoring, London   Spring 2015
· Provided GCSE tutoring for underprivileged high school girls.

PUBLICATIONS

Understanding and predicting user dissatisfaction in a neural generative chatbot
Abigail See, Christopher D. Manning
⋆ Nominated for Best Paper Award ⋆
Special Interest Group on Discourse and Dialogue (SIGDIAL), 2021 (Video presentation)

Neural Generation Meets Real People: Towards Emotionally Engaging Mixed-Initiative Conversations
Ashwin Paranjape*, Abigail See*, Kathleen Kenealy, Haojun Li, Amelia Hardy, Peng Qi, Kaushik Ram Sadagopan, Nguyet Minh Phu, Dilara Soylu, Christopher D. Manning
3rd Proceedings of Alexa Prize, 2020

Do Massively Pretrained Language Models Make Better Storytellers?
Abigail See, Aneesh Pappu, Rohun Saxena, Akhila Yerukola, Christopher D. Manning
CoNLL 2019 (Poster presentation)

What makes a good conversation? How controllable attributes affect human judgments
Abigail See, Stephen Roller, Douwe Kiela, Jason Weston
NAACL 2019 (Oral presentation)

Get To The Point: Summarization with Pointer-Generator Networks
Abigail See, Peter J. Liu, Christopher D. Manning
ACL 2017 (Oral presentation)

Compression of Neural Machine Translation Models via Pruning
Abigail See*, Minh-Thang Luong*, Christopher D. Manning
CoNLL 2016 (Poster presentation)

The Cost of Principles: Analyzing power in Compatibility Weighted Voting Games
Abigail See, Yoram Bachrach, Pushmeet Kohli
AAMAS 2014

Ramsey vs Lexicographic Termination Proving
Byron Cook, Abigail See, Florian Zuleger
TACAS 2013 (Oral presentation)

AWARDS

Forsythe Award for Excellence in Student Teaching, Stanford, **2019**
Google PhD Fellowship, **2019**
Gerald J. Lieberman Fellowship for Research, Teaching and Service to the University, Stanford, **2018**
Centennial Teaching Assistant Award, Stanford, **2018**
NVIDIA Graduate Fellowship, **2017**
College Exhibition and College Prize, Queens' College, Cambridge, **2011**
Gold medal and Distinction, UKMT Intermediate Maths Olympiad, **2008**
1st place, National Cipher Challenge, **2007**

SERVICE

Reviewer, Association of Computational Linguistics (ACL), **2017, 2018, 2019, 2020, 2021** (Outstanding reviewer 2021)
Reviewer, Computational Natural Language Learning (CoNLL), **2018**
Reviewer, ACL Student Research Workshop (ACL-SRW), **2019**
Reviewer, Workshop on Deep Generative Models for Highly Structured Data, **2019**
Reviewer, Workshop on NLP Open Source Software (NLP-OSS), **2018**
Reviewer, Workshop on Neural Machine Translation (WNMT), **2018**
Organizing Committee member, Workshop on Human-in-the-Loop Dialogue Systems, **2020**

SKILLS

Software	Python, Tensorflow, Pytorch (extensive)
	MATLAB, F#, AWS (significant)
	Javascript, D3, Java, Haskell (basic)
Languages	English (native), French (basic)