Sebastian **Gehrmann**

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2019 Ph.D. Computer Science, Harvard University.

Thesis: Human-Al Collaboration for Natural Language Generation with Interpretable Neural Networks.

Advisors: Barbara Grosz and Sasha Rush

SM Computer Science, Harvard University. GPA 3.9

2015 B.Sc. Business Informatics, Nordakademie, Germany. ECTS Grade A



Head of NLP, CTO OFFICE, BLOOMBERG, NYC

Present

As Head of NLP, I am part of the machine learning product and strategy team. I work with teams across the company to improve their products using language technology and I devise the long-term research and development plan for NLP infrastructure used across the company. I further contribute to research projects in the space of large language models, data governance, and various NLP tasks.

2020 Senior Research Scientist, GOOGLE, NYC

I developed evaluation strategies for language-producing models across many languages and tasks: 2022

- > In the Generation, Evaluation, and Metrics (GEM) project, I lead 100+ researchers in documenting datasets and building infrastructure to automatically evaluate models across 40+ generation tasks.
- > I worked with large language model projects to ensure that they are evaluated in a responsible and consistent way, acting as evaluation chair for BigScience and contributing to PaLM.

Summer 2018 + 2019

Document Systems and NLP Research Intern, ADOBE, San Jose, CA

I studied how generated summaries help humans understand and share information in long documents. Reference: Franck Dernoncourt

Fall 2018

Graduate Research Intern, IBM, Cambridge, MA

I developed interactive models and analysis tools for controllable generation of protein sequences. Reference: Hendrik Strobelt

Summer 2016

Collaborator, Bruno Kessler Foundation, Trento, Italy

I created an automatic mediation approach that guides people through the creation of a shared narrative. References: Massimo Zancanaro and Oliviero Stock

2011-2015

Dual Student, EPPENDORF AG, Hamburg, Germany

I worked in project management for customer relationship management and developed and led software training sessions for field engineers across multiple European countries.

Selected Publications

Please see my [Google Scholar] profile for a full list of my 50+ publications.

GEMv2: MULTILINGUAL NLG BENCHMARKING IN A SINGLE LINE OF CODE

EMNLP DEMO 2022

Sebastian Gehrmann, et al. (78 authors)

☑ Website ☑ Paper

REPAIRING THE CRACKED FOUNDATION: A SURVEY OF OBSTACLES IN EVALUATION PRACTICES FOR GENERATED TEXT

JAIR

Sebastian Gehrmann, Elizabeth Clark, Thibault Sellam

✓ Paper

THE GEM BENCHMARK: NATURAL LANGUAGE GENERATION, ITS EVALUATION AND METRICS

GEM WORKSHOP 2021

Sebastian Gehrmann, et al. (56 authors)

✓ Paper

Investigating Gender Bias in Language Models Using Causal Mediation Analysis

NEURIPS 2020

Jesse Vig*, Sebastian Gehrmann*, Yonatan Belinkov*, Sharon Qian, Daniel Nevo, Yaron Singer, Stuart Shieber

☑ Paper • Code

BOTTOM-UP ABSTRACTIVE SUMMARIZATION

EMNLP 2018

Sebastian Gehrmann, Yuntian Deng, Alexander Rush

☑ Paper • Code

SEQ2SEQ-VIS: A VISUAL DEBUGGING TOOL FOR SEQUENCE-TO-SEQUENCE MODELS

VAST 2018

Hendrik Strobelt*, Sebastian Gehrmann*, Michael Behrisch, Adam Perer, Hans-Peter Pfister, Alexander Rush

☑ Website and Demo ☑ Paper

SELECTED TALKS

Do we know what we don't know? The state of evaluation in NLP

2022

Stanford NLP Seminar.

Stanford NLP Seminar.

MEASURING THE QUALITY OF NATURAL LANGUAGE GENERATION SYSTEMS

2022

Invited Talk by the Generation Special Interest Group of ACL and the Scottish Informatics and Computer Science Alliance.

☑ slides **☑** Recording

Breaking News: It's time to fix evaluation of generated text

2021

Keynote at the third workshop on New Frontiers in Summarization.

Slides

HUMAN-AI COLLABORATION FOR NATURAL LANGUAGE GENERATION WITH INTERPRETABLE NEURAL NETWORKS

2020

Invited talk at the Synthetic Intelligence Forum, organized by the NRC Canada.

☑ Recording

TEACHING AND MENTORING

| 2020-present | Hosted, co-hosted, and/or advised the following interns at Google: Alon Jacovi, Amy Pu, Esin Durmus, Jiao |
|--------------|---|
| | Sun, Kelechi Ogueji, Mirac Suzgun |

ACL 2020 Tutorial "Interpretability and Analysis in Neural NLP", co-taught with Yonatan Belinkov and Ellie Pavlick

Structure and Interpretation of Deep Networks, Co-Organizer, MIT Winter 2020

Fall 2018 HST.953: Collaborative Data Science in Medicine, Mentor, MIT CS182: Artificial Intelligence, Teaching Fellow, Harvard SEAS

Fall 2017 Fall 2016 CS108: Intelligent Systems: Design and Ethical Challenges, Teaching Fellow, Harvard SEAS

2015 & 2016 Data Analysis with Python, Intructor, Nordakademie, Elmshorn, Germany

2013 & 2014 Introduction to Finance, Instructor, Nordakademie, Germany

LEADERSHIP

- 2022 2nd Workshop on Natural Language Generation, Evaluation, and Metrics at EMNLP 2022, General Chair
- 2021 1st Workshop on Natural Language Generation, Evaluation, and Metrics at ACL 2021, Organizer.
- 2020 1st Workshop on Evaluating NLG Evaluation at INLG 2020, Organizer
- 2019 International Natural Language Generation Conference, Tokio, Japan, Publicity Chair
- 2016–2019 Computer Science Graduate Council, Harvard University, President

Y AWARDS

- 2022 Outstanding Paper Award at MLEval@ICLR 2022
- 2020 Outstanding Demo Award at NeurIPS 2020
- 2019 Paper Nominated for the best demo award at ACL 2019
- 2019 Member of the Siebel Scholar class of 2020
- 2019 One of ten recipients of the Adobe Research Fellowship selected from over 1,000 applicants
- 2019 2 x Adobe Research Gift for Harvard NLP (\$5,000 each)
- 2019 Best automated scores at the TL;DR challenge out of 12 submitted systems
- 2018 Best paper honorable mention at IEEE Vis 2018
- 2018 Harvard Open-Access Publishing Equity award (\$1,500)
- 2017 Best automated scores at the E2E NLG challenge out of 60 submitted systems
- 2016/17 Karina A. Chen Graduate Student Research Fellowship in Engineering and Applied Sciences
- 2013/14 Award for outstanding service to the community of Nordakademie



REVIEWING AND COMMITTEES

- SAC NAACL 2022
- AC AAAI 2021, ACL 2020, 2021, ACL-ARR 2021-2022, EACL 2021, EMNLP 2021, 2022, NAACL 2021
- Conference PC ACL 2018, 2019, ACL-ARR 2021, CoNLL 2019, EMNLP 2019 (outstanding reviewer), 2020 (outs-

tanding reviewer) IEEE VIS 2019, NAACL 2019, NeurIPS 2020 (top 10% reviewer), 2021, INLG

2018, IUI 2018, 2019

- Workshop PC BlackboxNLP 2020, 2021, EACL SRW 2020, HAI-GEN 2020, 2021, NeuralGen 2019, New Frontiers
 - in Summarization 2019, SustaiNLP 2020, VisXAI 2018, 2019, 2020, 2021, WebNLG+ 2020
 - Journals IJMI, JAIR, JMIR, JMLR, PLoS One, TACL