

EDUCATION

University of Washington

M.S. in Computer Science (GPA: 3.98)

Advisor: Yejin Choi

Seattle, WA

June 2024

University of Washington

B.S. in Computer Science, Departmental Honors, Cum Laude (GPA: 3.86)

Advisor: Yejin Choi

Seattle, WA

June 2021

PUBLICATIONS

CONFERENCE PAPERS

[C6] **Skyler Hallinan**, Faeze Brahman, Ximing Lu, Jaehun Jung, Sean Welleck, and Yejin Choi. “STEER: Unified Style Transfer with Expert Reinforcement.” In Findings of EMNLP, December 2023.

[C5] Aman Madaan, Niket Tandon, Prakhar Gupta, **Skyler Hallinan**, Luyu Gao, Sarah Wiegrefe, Uri Alon, Nouha Dziri, Shrimai Prabhumoye, Yiming Yang, Shashank Gupta, Bodhisattwa Prasad Majumder, Katherine Hermann, Sean Welleck, Amir Yazdanbakhsh, Peter Clark. “Self-Refine: Iterative Refinement with Self-Feedback.” In NeurIPS, 2023.

[C4] Ximing Lu, Faeze Brahman, Peter West, Jaehun Jang, Khyathi Chandu, Abhilasha Ravichander, Lianhui Qin, Prithviraj Ammanabrolu, Liwei Jiang, Sahana Ramnath, Nouha Dziri, Jillian Fisher, Bill Yuchen Lin, **Skyler Hallinan**, Xiang Ren, Sean Welleck and Yejin Choi. “Inference-Time Policy Adapters (IPA): Tailoring Extreme-Scale LMs without Fine-tuning.” In Proceedings of EMNLP, December 2023.

[C3] **Skyler Hallinan**, Alisa Liu, Yejin Choi, and Maarten Sap. “Detoxifying Text with MaRCO: Controllable Revision with Experts and Anti-Experts.” In Proceedings of ACL (Short), July 2023.

[C2] Jiacheng Liu, **Skyler Hallinan**, Ximing Lu, Pengfei He, Sean Welleck, Hannaneh Hajishirzi, and Yejin Choi. “Rainier: Reinforced Knowledge Introspector for Commonsense Question Answering.” In Proceedings of EMNLP, December 2022.

[C1] Saadia Gabriel, **Skyler Hallinan**, Maarten Sap, Pemi Nguyen, Franziska Roesner, Eunsol Choi, and Yejin Choi. “Misinfo Reaction Frames: Reasoning about Readers Reactions to News Headlines.” In Proceedings of ACL, May 2022.

PREPRINTS

[P1] Sahana Ramnath, Brihi Joshi, **Skyler Hallinan**, Ximing Lu, Liunian Harold Li, Aaron Chan, Jack Hessel, Yejin Choi, and Xiang Ren. “Tailoring Self-Rationalizers with Multi-Reward Distillation.” Submitted to ICLR 2024. OpenReview link

TO BE SUBMITTED

[T3] **Skyler Hallinan**, Mingyue Shang, Zijian Wang, Siddarth Jain, Leo Boystov, and Xiaofei Ma. “Enhancing Code Language Models with Chunk Lookahead Decoding.” To be submitted to ACL 2024.

[T2] **Skyler Hallinan**, Qibin Chen, Michael Tu, Violet Yao, and Andrew Fandrianto. “Citation Tuning: Enabling Large Language Models to Cite their Sources.” To be submitted to ACL 2024.

[T1] **Skyler Hallinan**, Ximing Lu, Jaehun Jung, Yejin Choi, and Sean Welleck. “The (Un)surprising Potential of Reward Conditioning for Reinforcement Learning for Language.” To be submitted to ACL 2024.

RESEARCH EXPERIENCE

xlab, Paul G. Allen School of Computer Science & Engineering

Undergraduate and Graduate Research Assistant, Advisor: Yejin Choi

Sep 2020 – Present

Seattle, WA

H2Lab, Paul G. Allen School of Computer Science & Engineering

Undergraduate Research Assistant, Advisor: Hannaneh Hajishirzi

Jun 2021 – Dec 2021

Seattle, WA

INDUSTRY EXPERIENCE

Web Answers Team, Apple

AI/ML Resident, Advisor: Chris Dubois

July 2023 – Present

Seattle, WA

- Worked on AI/ML research projects related to reducing hallucinations in retrieval-based QA systems

AWS CodeWhisperer, Amazon

Applied Scientist Intern, Advisor: Xiaofei Ma

Apr 2023 – Jul 2023

Seattle, WA

- Worked on improving code generation language models with controlled decoding by using lookahead

Bloomberg

Software Engineering Intern, BLAW Search

Jun 2021 – Aug 2021

New York, NY

- Developed and implemented two novel, zero-shot classification approaches for short text using LEGAL-BERT, achieving 67% performance on the test set (accuracy) compared to human annotators

AWARDS AND HONORS

Outstanding Senior Award

2021

Paul G. Allen School of Computer Science and Engineering, University of Washington

Seattle, WA

- One of three graduating seniors out of 450 chosen based on exceptional academic performance, significant contribution to the advancement of knowledge, and demonstrated leadership potential and good citizenship.

Dean's Medal Nomination

2021

College of Arts & Sciences, University of Washington

Seattle, WA

- Nominated for the 2021 College of Arts & Sciences Dean's Medal, awarded to the top graduating senior in the department

Levinson Emerging Scholar

2020

University of Washington

Seattle, WA

- Awarded to talented and highly motivated juniors and seniors pursuing creative and advanced STEM research

REVIEWING

Reviewer for ACL Rolling Review

November 2023 – Present

TEACHING

Head Teaching Assistant, **CSE 573: (Graduate) Introduction to Artificial Intelligence**

University of Washington; Instructor: Hannaneh Hajishirzi

Winter 2023

Seattle, WA

Teaching Assistant, **CSE 473: Introduction to Artificial Intelligence**

University of Washington, Instructor(s): Hannaneh Hajishirzi, Luke Zettlemoyer

Spring 2021 – Autumn 2023

Seattle, WA

Teaching Assistant, **CSE 421: Introduction to Algorithms**

University of Washington, Instructor: Paul Beame

Winter 2020

Seattle, WA

SERVICE

Undergraduate Research Leader

University of Washington Undergraduate Research Program

2020-2021

Seattle, WA

- Presented at freshman seminars and other events to advocate for and spread awareness of undergraduate research

“Big” (Mentor)

University of Washington ACM Big/Little Mentorship Program

2020-2022

Seattle, WA

- Mentored undergraduate computer science students, providing internship help, career planning, and course advice

OTHER PUBLICATIONS

CONFERENCE PAPERS

[1] **S. Hallinan**, J. Buszkiewicz, C. Rose, and A. Drewnowski, “Ultra-processed Foods are Needed for Nutrient Adequate Diets: Linear Programming Analyses of the Seattle Obesity Study”, *Nutrients* 2021

WORKSHOP PAPERS

[2] A. T. Chen, J. H. Chang, **S. Hallinan**, and D. C. Mohr, “Mapping User Trajectories: Using Participant Flows to Examine Behavior and Outcomes in Digital Health Intervention Data”, 2019 IEEE Workshop on Visual Analytics in Healthcare (VAHC)

POSTERS

[3] P.C. Mamiya, K. Liu, Y. Mamiya, **S. Hallinan**, P. Mulcaire, N. Smith, P. Kuhl, “Cognitive tasks and natural language processing reveal a correlation between attention control and language fluency”, Cognitive Neuroscience Society, 2021