Anthony Chen

My current research focuses on large language models and aims to create benchmarks to evaluate their many diverse, emergent capabilities and methodologies to address their weaknesses (e.g., lack of attribution and hallucinations).

Education

- 2018-2023 **Ph.D. in Computer Science**, *University of California, Irvine*. Advised by Sameer Singh.
- 2016-2018 M.S. in Computer Science, University of California, Irvine.
- 2012-2016 **B.S. in Computer Science**, *University of California, Davis.*

Professional History

- Summer 2022 Research Scientist, Intern, Google, Mountain View, California,
 - Hosted by Kelvin Guu and Hongrae Lee.
 - Developed novel models for editing large language model generations for improved facutality.
- Summer 2021 Research Scientist, Intern, Verneek, New York, New York,
 - Hosted by Sam Anzaroot and Nasrin Mostafazadeh.
 - Worked on retrieval-augmented methods for automatic construction of knowledge bases.
- Summer 2020 **Research Scientist, Intern**, Apple, Remote,
 - Hosted by Pallavi Gudipati.
 - Developed datasets to measure the robustness of Siri's entity linking systems to bias.
- Summer 2018 Data Scientist, Intern, Ancestry, San Francisco, California.
- Summer 2017 Data Scientist, Intern, Allstate, Menlo Park, California.
 - 2014 Software Engineer, Intern, Intel, Folsom, California.

Publications

- 2023 PURR: Efficiently Editing Language Model Hallucinations by Denoising Language Model Corruptions,
 - Anthony Chen, Panupong Pasupat, Sameer Singh, Hongrae Lee, and Kelvin Guu. arXiv
- 2023 RARR: Researching and Revising What Language Models Say, Using Language Models,

Luyu Gao, Zhuyun Dai, Panupong Pasupat, *Anthony Chen*, Arun Tejasvi Chaganty, Yicheng Fan, Vincent Y. Zhao, Ni Lao, Hongrae Lee, Da-Cheng Juan, and Kelvin Guu.

Association for Computational Linguistics (ACL)

- 2021 Entity-Based Knowledge Conflicts in Question Answering,
 - Shayne Longpre, Kartik Perisetla, *Anthony Chen*, Nikhil Ramesh, Chris DuBois, and Sameer Singh.
 - Empirical Methods in Natural Language Processing (EMNLP)

2021 Evaluating Entity Disambiguation & the Role of Popularity in Retrieval-Based NLP,

Anthony Chen, Pallavi Gudipati, Shayne Longpre, Xiao Ling, and Sameer Singh. Association for Computational Linguistics and the International Joint Conference on Natural Language Processing (ACL-IJCNLP)

2020 MOCHA: A Dataset for Training and Evaluating Generative Reading Comprehension Metrics,

Anthony Chen, Gabriel Stanovsky, Sameer Singh, and Matt Gardner. Empirical Methods in Natural Language Processing (EMNLP)

2019 Evaluating Question Answering Evaluation,

Anthony Chen, Gabriel Stanovsky, Sameer Singh, and Matt Gardner.

Machine Reading for Question Answering Workshop @ Empirical Methods in Natural Language Processing (EMNLP) Best Paper

Awards

2022 Noyce Fellowship, Assessing and Addressing the Societal Implications of Using Neural Retrievers in Real-World NLP.
Awarded to Anthony Chen and Sameer Singh.

2019 Best Paper, Evaluating Question Answering Evaluation, EMNLP Workshop on Machine Reading and Question Answering (MRQA). Awarded to Anthony Chen, Gabriel Stanovsky, Sameer Singh, and Matt Gardner.

Invited Talks

- 2023 **UC Irvine AI/ML Seminar**, RARR: Researching and Revising What Language Models Say, Using Language Models, Irvine, CA.
- 2020 **Apple**, Developing Learned Metrics for Generative Reading Comprehension, Virtual.
- 2020 **MRQA Workshop @ EMNLP**, Evaluating Question Answering Evaluation, Hong Kong.

Professional Service

- 2021 **Reviewer**, Open-Domain Reasoning Under Multi-Modal Settings Workshop @ Computer Vision and Pattern Recognition (CVPR).
- 2021 **Site Developer**, Automated Knowledge Base Construction (AKBC).
- 2021 **Reviewer**, Empirical Methods in Natural Language Processing (EMNLP).
- 2018 Reviewer, Empirical Methods in Natural Language Processing (EMNLP).