

George Z. Wei

CURRICULUM VITAE

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<https://gzhongwei.github.io>

Research Interests

Interested in multimodal foundation models as well as 3D computer vision, specifically spatial understanding and 3D reconstruction.

Education

Carnegie Mellon University

M.S. Robotics (Advisor: [László A. Jeni](#))

Pittsburgh, PA

2024 – 2026

University of Massachusetts Amherst

B.S. Computer Science & Statistics/Data Science (Advisors: [Mohit Iyyer](#) & [Ina Fiterau](#))

Amherst, MA

2018 – 2022

- Thesis: Analyzing Low Recall Text-Image Retrieval with LXMERT and CLIP

Experience

FAIR, AI @ Meta

AI Resident under [Satwik Kottur](#)

Menlo Park, CA

Jul 2022 – Jul 2024

- Developed annotation tooling to gather crowdworkers' relevance judgements of candidate goals given egocentric video using [Mephisto](#), drastically decreasing annotation turnaround time by **80%**.
- Refactored [EgoVLP](#) to use [hydra](#), [submitit](#), and [pytorch_lightning](#), leading to much faster experiment iteration speed.

Combinatorics and Algorithms for Real Problems REU

Research Intern under Prof. [John P. Dickerson](#) and Prof. [Tom Goldstein](#)

College Park, MD

Jun 2021 – May 2022

- Standardized and sped up inference code of SOTA Facial Detection to produce predictions on 3 million+ images in days.
- Developed the front end survey for comparing human and machine bias in face recognition as well as the backend for serving the webpages.

Publications

* indicates equal contribution

1. Robustness Disparities in Face Detection

Samuel Dooley, **George Z. Wei**, Tom Goldstein, John Dickerson.

[Advances in Neural Information Processing Systems. 2022.](#)

2. Maruna Bot: An Extensible Retrieval-Focused Framework for Task-Oriented Dialogues

Amit Hattimare, Arkin Dharawat, Yelman Khan, Yen-Chieh Lien, Chris Samarinas, **George Z. Wei**, Yulin Yang, Hamed Zamani.

Alexa Prize TaskBot Challenge Proceedings. 2022.

3. Are Commercial Face Detection Models as Biased as Academic Models?

Samuel Dooley*, **George Z. Wei***, Tom Goldstein, John P. Dickerson.

arXiv. 2022.

4. An Analysis of Low Recall Text-Image Retrieval with LXMERT and CLIP

George Z. Wei, Ina Fiterau, Mohit Iyer.

Undergraduate Honors Thesis. 2021.

5. Comparing Human and Machine Bias in Face Recognition

Samuel Dooley*, Ryan Downing*, **George Wei***, Nathan Shankar, Bradon Thymes, Gudrun Thorkelsdottir, Tiye Kurtz-Miott, Rachel Mattson, Olufemi Obiwumi, Valeriia Cherepanova, Micah Goldblum, John P Dickerson, Tom Goldstein.

arXiv. 2021.

Honors and Awards

Outstanding UCA Award

Manning College of Information and Computer Sciences

COMPSCI 453: Computer Networking

COMPSCI 311: Introduction to Algorithms

UMass Amherst

Fall 2020 – Fall 2021

Spring 2021, Fall 2021

Fall 2020

Academic Service

Reviewer

DSTC11 Track 1

'22

NeurIPS Datasets and Benchmark Track

'22

Undergraduate Course Assistant

Manning College of Information and Computer Sciences

COMPSCI 453: Computer Networking

COMPSCI 373: Introduction to Computer Graphics

COMPSCI 311: Introduction to Algorithms

COMPSCI 121: Introduction to Problem Solving with Computers

UMass Amherst

Fall 2019 – Spring 2022

Spring 2021 – Spring 2022

Spring 2022

Fall 2020

Fall 2019, Spring 2020