Zeqi Gu | Curriculum Vitae

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Education

Cornell Tech, Cornell University

New York, NY

Ph.D. candidate in Computer Science

2021 - Present

Directions: Computer Vision, Computer Graphics

Commitee: Prof. Abe Davis, Prof. Noah Snavely, Prof. Ramin Zabih, Prof. Deborah Estrin

• Cornell University

Ithaca, NY 2016 – 2020

Bachelor of Science (Magna Cum Laude)

Majors: Computer Science, Mathematics

Advisor: Prof. Serge Belongie

Publications

- Zeqi Gu, Ethan Yang, Abe Davis, <u>Filtered-Guided Diffusion: Fast Filter Guidance for Black-Box Diffusion</u>
 Models, In Submission.
- **Zeqi Gu**, Wenqi Xian, Noah Snavely, Abe Davis, <u>FactorMatte: Redefining Video Matting for Re-Composition Tasks</u>, SIGGRAPH 2023 (Journal).
- Jan Ondras, Di Ni, Xi Deng, Zeqi Gu, Henry Zheng, Robotic Dough Shaping, ICCAS 2022(Oral).
- **Zeqi Gu***, Horace He*, Qian Huang*, Isay Katsman*, Serge Belongie, Ser-Nam Lim, <u>Enhancing</u> Adversarial Example Transferability with an Intermediate Level Attack, ICCV 2019. (* Equal contribution)

Work Experience

Cartoon Generation

Research Intern @ Adobe Research

San Francisco, CA

Mentor: Matthew Fisher

May – Dec 2023

Developing a diffusion-based cartoon generation pipeline that, given a clip of a character in motion, and new poses at certain keyframes, first interpolates the new poses to be a sequence of frames; then deforms the character to render the new video. Building the first cartoon video dataset with accurate keypoint annotations with Adobe's Character Animator App.

Creative Text Agent

Research Intern @ Adobe Research

San Jose, CA

Mentor: Zhaowen Wang

May - Nov 2019

Built a recommendation system that provides potentially favorable choices for posters designers using Adobe software like Photoshop. The system takes the user's design history as inputs and visualizes the previews of its recommended designs for the next step on the sidebars of the interface.

Fashionpedia Dataset

SDE @ Cornell Graphics and Vision Group

Ithaca, NY

Mentor: Prof. Serge Belongie

Sep 2019 - Feb 2020

Led the team designing and building the dataset annotation tool for the currently largest and most fine-grained ML fashion dataset. Paper published at ECCV 2020 Oral.

Leaning Physical Causality with Data Efficiency

Research Assistant @ Stanford University

Palo Alto, CA (remote)

Mentor: Prof. Jiajun Wu

June - Nov 2020

Used reinforcement active learning to enable a robot to conduct physics experiments to learn the underlying Granger causal graph and numerical relations between attributes such as weight, shape, friction, etc. Learned about reinforcement learning, graph neural networks and feature disentanglement.

Self-Driving Vehicle Map Generation

Software Engineer Intern @ Uber

Pittsburgh, PA

May – Aug 2018

In the self-driving vehicle Advanced Technologies Group, designed and implemented an A/B testing pipeline and related visualization tools for automatic map generation.

Services

• Technical Paper Reviewer

- CVPR Workshop on Computer Vision for AR/VR 2022

- AAAI Conference on Artificial Intelligence

2022, 23

- ICCV International Conference on Computer Vision

2023

Teaching Assistant

- CS 6670: Graduate Level Computer Vision

Fall 2021

- CS 4670: Introduction to Computer Vision

Spring 2022