George Cazenavette

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Education

- **Massachusetts Institute of Technology** — Cambridge, MA
  PhD in Electrical Engineering and Computer Science — *Aug 2022 – Present*
  Advisors: Vincent Sitzmann and Antonio Torralba
- **Carnegie Mellon University** — Pittsburgh, PA
  M.S. in Robotics — *Sep 2019 – Aug 2022*
  Advisors: Simon Lucey and Jun-Yan Zhu
- **Louisiana Tech University** — Ruston, LA
  B.S. in Computer Science, Mathematics, and Cyber Engineering — *Sep 2015 – May 2022*

Selected Publications

- **Dataset Distillation for Pre-Trained Self-Supervised Vision Models**
  George Cazenavette, Antonio Torralba, and Vincent Sitzmann
  NeurIPS, 2025
- **Fake-Inversion: Learning to Detect Images from Unseen Models by Inverting Stable Diffusion**
  George Cazenavette, Avneesh Sud, Thomas Leung, and Ben Usman
  CVPR, 2024
- **Towards Lossless Dataset Distillation via Difficulty-Aligned Trajectory Matching**
  Ziyao Guo, Kai Wang, **George Cazenavette**, Hui Li, Kaipeng Zhang, and Yang You
  ICLR, 2024
- **Diffusion with Forward Models: Solving Stochastic Inverse Problems Without Direct Supervision**
  Ayush Tewari, Tianwei Yin, **George Cazenavette**, Semon Rezchikov, Joshua B. Tenenbaum, Frédo Durand, William T. Freeman, and Vincent Sitzmann
  NeurIPS, 2023
- **Generalizing Dataset Distillation via Deep Generative Prior**
  George Cazenavette, Tongzhou Wang, Antonio Torralba, Alexei Efros, and Jun-Yan Zhu
  CVPR, 2023
- **Dataset Distillation by Matching Training Trajectories**
  George Cazenavette, Tongzhou Wang, Antonio Torralba, Alexei Efros, and Jun-Yan Zhu
  CVPR, 2022
- **Architectural Adversarial Robustness: The Case for Deep Pursuit**
  George Cazenavette, Calvin Murdock, and Simon Lucey
  CVPR, 2021

Internships

- **Google AI** — Cambridge, MA
  Research Intern, Media Integrity Group — *May 2023 - Nov 2023*
  - **Fake Image Detection**: Developed a diffusion inversion-based method of fake image detection using only Stable Diffusion v1 for training images. Curated benchmark dataset of fake images from many models and visually similar real images found via Google Lens. Published at CVPR 2024.
- **Argo AI** — Pittsburgh, PA
  Research Intern, Perception Team — *May 2022 - Sep 2022*
  - **NeRF for Autonomous Driving**: Integrated camera and lidar data from Argo's autonomous vehicle fleet to construct neural radiance fields. Developed techniques to remove "movers" from training data for static scenes.

Fellowships

- **National Science Foundation GRFP**