

# Gene Chou

gc492@cornell.edu · genechou.com · github.com/gene-chou

## EDUCATION

---

**Cornell University** 2023 -  
PhD student in computer science  
Advisors: Noah Snaveley and Bharath Hariharan

**Princeton University** 2018 - 2022  
BSc in computer science, minor in applied mathematics  
*Honors: magna cum laude, departmental GPA: 3.96 / 4.0*

## PUBLICATIONS

---

**Diffusion-SDF: Conditional Generative Modeling of Signed Distance Functions** ICCV 2023  
**G. Chou**, Y. Bahat, F. Heide  
Performs diffusion on the latent space of neural SDFs to conditionally generate 3D objects.

**GenSDF: Two-Stage Learning of Generalizable Signed Distance Functions** NeurIPS 2022 (Featured)  
**G. Chou**, I. Chugunov, F. Heide  
Reconstructs neural SDFs from raw input point clouds of over a hundred unseen object classes.

## RESEARCH

---

**Generative AI | Backflip AI** | San Francisco, CA 6/2023 - 9/2023  
Generating 3D assets (at scale, text and image guidance, texture) at a generative AI startup.

**Vision + RL | Disney Research Imagineering** | Glendale, CA 2/2023 - 7/2023  
Researched large vision models + RL for human-robot interaction and sim-to-real transfer.

**3D Scene Representations | Princeton Computational Imaging Lab** | Princeton, NJ 3/2022 - 2/2023  
Researched generalization and generation of neural scene representations, advised by Prof. Felix Heide.

**Algorithmic Fairness | Princeton Visual AI Lab** | Princeton, NJ 6/2021 - 12/2021  
Stress-tested algorithmic fairness via synthetic data generation, advised by Prof. Olga Russakovsky.

**ML Algorithms | Multimedia Technology Lab at Academia Sinica** | Taipei, Taiwan 6/2020 - 8/2021  
Researched meta-learning and style transfer, advised by Prof. Hong-Yuan Mark Liao. Collaborated with industry to augment traffic data in different weather and lighting for improved monitoring.

## EXPERIENCE

---

**Teaching**  
TA for Algorithms and Data Structures at Princeton (2019-2022)

**Reviewing**  
Reviewer for CVPR 2023, ICCV 2023  
Interviewer for Princeton University undergraduate admissions

**Awards**  
NSF Graduate Research Fellowship (2023 - 2028)