Johanna Karras

Research Interest

My research interests lie at the intersection of computer vision, graphics, and machine learning. I am currently a fourth-year PhD student at the Graphics and Imaging Lab (GRAIL) at the University of Washington, with a focus on generative AI. I am co-advised by Ira Kemelmacher Shlizerman, Steve Seitz, and Brian Curless.

EDUCATION

University of Washington, PhD Computer Science 2021 - present

2017 - 2021 California Institute of Technology, B.S. Computer Science

KEY SKILLS

- Proficiency in machine learning libraries TensorFlow, PyTorch, and Jax.
- Strong programming skills in Python, C++, C, Java, and MySQL

Research

Fashion-VDM: Video Diffusion Model for Virtual Try-On, Johanna Karras, Yinqwei Li, Nan Liu, Luyang Zhu, Innfarn Yoo, Andreas Luqmayr, Chris Lee, Ira Kemelmacher-Shlizerman SIGGRAPH Asia 2024

DreamPose: Fashion Image-to-Video Synthesis via Stable Diffusion, Johanna Karras, Aleksander Holynski, Ting-Chun Ira Kemelmacher-Shlizerman ICCV 2023

Deep Neural Networks for Black Hole Imaging Advised by He Sun, Katie Bouman WiCV, CVPR 2021

Internships

Google Research, PhD Student Researcher

June, 2023 - Now

Streetscope Inc., Software Engineering Intern

April - September, 2021

J.P. Morgan and Chase, Software Engineering Intern

June - August, 2019

Microsoft, Software Engineering Intern

June – September, 2018

Awards & Recognitions

- UW Reality Lab Amazon Fellowship, 2022
- Google CSRMP (Computer Science Research Mentorship Program), 2021
- NCWIT Collegiate Award Finalist (National Center for Women in Computing), 2020
- Caltech Amasa Bishop Travel Grant, 2020
- Caltech Summer Undergraduate Research Fellowship, 2020