

Johanna S. Karras

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🌐 johannakarras.github.io

in [johannakarras](#)

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RESEARCH INTEREST

My research interests lie at the intersection of computer vision, graphics, and machine learning. I am currently pursuing my PhD at the Graphics and Imaging Lab (GRAIL) at the University of Washington, with a focus on generative AI.

EDUCATION

University of Washington

2021 - Present

PhD Computer Science

Co-advised by Ira Kemelmacher-Shlizerman, Steve Seitz, and Brian Curless

Graphics, Computer Vision, and Machine Learning

California Institute of Technology

2017 - 2021

B.S Computer Science, minor in Information and Data Science

Teaching Assistant, Undergraduate Reserach, NCAA Track & Cross Country

KEY SKILLS

- Computer vision, deep learning, computational photography, object detection, and object tracking
- Machine learning proficiency in TensorFlow, Keras, and PyTorch
- Strong programming skills in Python, C++, C, Java, and MySQL
- Fluency in English, Finnish, Spanish, French

RESEARCH

Fashion-VDM: Video Diffusion Model for Virtual Try-On

SIGGRAPH Asia 2024

Johanna Karras, Yingwei Li, Nan Liu, Luyang Zhu, Innfarn Yoo, Andreas Lugmayr, Chris Lee, Ira Kemelmacher-Shlizerman

DreamPose: Fashion Image-to-Video Synthesis via Stable Diffusion

ICCV 2023

Johanna Karras, Aleksander Holynski, Ting-Chun Wang, Ira Kemelmacher-Shlizerman

Deep Neural Networks for Black Hole Imaging

WiCV, CVPR 2021

Advised by He Sun, Katie Bouman

PROFESSIONAL EXPERIENCE

Google Research

2023 - Present

PhD Student Researcher

Streetscope Inc.

2021

Computer Vision & Machine Learning Intern

J.P. Morgan & Chase

2019

Software Engineering Intern

Microsoft Artificial Intelligence & Research

2018

Software Engineering "Explore" Intern

TEACHING & OUTREACH

CSE 160: Data Programming

2024

UW K-12 CS Outreach Program	2022
UW CSENext Mentorship Program	2022
CS 4: Fundamentals of Computer Programming	2019
CS 2: Introduction to Programming Methods	2018
CS 1: Introduction to Computer Programming	2018, 2019, 2020

AWARDS & RECOGNITIONS

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