

Peihao Zhu

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WORK EXPERIENCE

Seed Team, ByteDance

Senior Research Scientist

San Jose, CA

Sep 2024 - present

Seed Team, ByteDance

Research Scientist

San Jose, CA

Jul 2023 - Aug 2024

Reality Lab, Meta

Research Scientist Intern

Burlingame, CA

Oct 2022 - Feb 2023

Creative Vision Lab, Snap

Research Scientist Intern

Los Angeles, CA

May 2022 - Sep 2022

EDUCATION

King Abdullah University of Science and Technology (KAUST)

PhD in Computer Science

Kingdom of Saudi Arabia

Dec 2019 - Jun 2023

King Abdullah University of Science and Technology (KAUST)

Master of Science in Computer Science

Kingdom of Saudi Arabia

Aug 2017 - Dec 2019

Institute of Automation, Chinese Academy of Sciences

Master candidate in Computer Science

China

Sep 2016 - Jul 2017

Northeastern University

Bachelor of Technology in Automation; GPA: 90.0/100; Rank: top 5%

China

Aug 2012 - Jun 2016

PROJECTS

ByteDance Doubao Video Generative Model - Unicorn (Development Phase)

ByteDance Seed Team: PixelDance × Seaweed (Dec 2024 - present)

ByteDance Doubao Video Generative Model - Seaweed

ByteDance Seed Team (Mar 2024 - Nov 2024)

[\[Blog\]](#) [\[Video\]](#) [\[Website\]](#)

Tiktok AI-moji

Virtual Avatar Team (Jul 2023 - Dec 2024)

[\[Blog\]](#) [\[Platform\]](#)

PUBLICATIONS

3DAvatarGAN: Bridging Domains for Personalized Editable Avatars

Rameen Abdal, Hsin-Ying Lee, [Peihao Zhu](#), Menglei Chai, Aliaksandr Siarohin, Peter Wonka, Sergey Tulyakov
Proc. IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2023

[\[Paper\]](#) [\[Webpage\]](#)

HairNet: Hairstyle Transfer with Pose Changes

[Peihao Zhu](#), Rameen Abdal, John Femiani, Peter Wonka

Proc. European Conference on Computer Vision (ECCV), 2022

[\[Paper\]](#) [\[Webpage\]](#)

CLIP2StyleGAN: Unsupervised Extraction of StyleGAN Edit Directions

Rameen Abdal, [Peihao Zhu](#), John Femiani, Niloy Mitra, Peter Wonka

SIGGRAPH Conference Proceedings, 2022

[\[Paper\]](#) [\[Webpage\]](#)

Mind the Gap: Domain Gap Control for Single Shot Domain Adaptation for Generative Adversarial Networks

[Peihao Zhu](#), Rameen Abdal, John Femiani, Peter Wonka

International Conference on Learning Representations (ICLR), 2022

[\[Paper\]](#) [\[Webpage\]](#)

Barbershop: GAN-based Image Compositing using Segmentation Masks

[Peihao Zhu](#), Rameen Abdal, John Femiani, Peter Wonka

ACM Transactions on Graphics (Proc. SIGGRAPH Asia), 2021

[\[Paper\]](#) [\[Webpage\]](#)

Improved StyleGAN Embedding: Where are the Good Latents?

[Peihao Zhu](#), Rameen Abdal, Yipeng Qin, John Femiani, Peter Wonka

ArXiv pre-print, 2021

[\[Paper\]](#) [\[Webpage\]](#)

Styleflow: Attribute-conditioned exploration of stylegan-generated images using conditional continuous normalizing flows

Rameen Abdal, [Peihao Zhu](#), Niloy Mitra, Peter Wonka
ACM Transactions on Graphics (TOG), 2021

[\[Paper\]](#) [\[Webpage\]](#)

Labels4Free: Unsupervised Segmentation using StyleGAN

Rameen Abdal, [Peihao Zhu](#), Niloy J. Mitra, Peter Wonka
Proc. IEEE International Conference on Computer Vision (ICCV), 2021

[\[Paper\]](#) [\[Webpage\]](#)

Flow-Guided Video Inpainting with Scene Templates

Dong Lao, [Peihao Zhu](#), Peter Wonka, Ganesh Sundaramoorthi
Proc. IEEE International Conference on Computer Vision (ICCV), 2021

[\[Paper\]](#) [\[Webpage\]](#)

SEAN: Image Synthesis with Semantic Region-Adaptive Normalization

[Peihao Zhu](#), Rameen Abdal, Yipeng Qin, Peter Wonka
Proc. IEEE Conference on Computer Vision and Pattern Recognition (CVPR Oral), 2020

[\[Paper\]](#) [\[Webpage\]](#)

Large Scale Architecture Asset Extraction from Panoramic Imagery

[Peihao Zhu](#), Wamiq Reyaz Para, Anna Fruehstueck, John Femiani, Peter Wonka
IEEE Transactions on Visualization and Computer Graphics (TVCG), 2020

[\[Paper\]](#) [\[Webpage\]](#)

AWARD & ACHIEVEMENTS

- **KAUST CEMSE Dean's List Award 2021-2022**
- **National Scholarship 2013**
- KAUST Fellowship 2017
- UCAS Scholarship 2016
- Scholarship for Outstanding Merits 2012-2016

SCIENTIFIC REFEREES

Prof. Peter Wonka

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<http://peterwonka.net>