

Peihao Zhu

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WORK EXPERIENCE

Seed Team, ByteDance <i>Senior Research Scientist</i>	San Jose, CA Sep 2024 - present
Seed Team, ByteDance <i>Research Scientist</i>	San Jose, CA Jul 2023 - Aug 2024
Reality Lab, Meta <i>Research Scientist Intern</i>	Burlingame, CA Oct 2022 - Feb 2023
Creative Vision Lab, Snap <i>Research Scientist Intern</i>	Los Angeles, CA May 2022 - Sep 2022

EDUCATION

King Abdullah University of Science and Technology (KAUST) <i>PhD in Computer Science</i>	Kingdom of Saudi Arabia Dec 2019 - Jun 2023
King Abdullah University of Science and Technology (KAUST) <i>Master of Science in Computer Science</i>	Kingdom of Saudi Arabia Aug 2017 - Dec 2019
Institute of Automation, Chinese Academy of Sciences <i>Master candidate in Computer Science</i>	China Sep 2016 - Jul 2017
Northeastern University <i>Bachelor of Technology in Automation; GPA: 90.0/100; Rank: top 5%</i>	China Aug 2012 - Jun 2016

PROJECTS

ByteDance Doubao Video Generation Foundation Model - Unicorn (Development Phase) <i>ByteDance Seed Team: PixelDance × Seaweed (Dec 2024 - present)</i>	
ByteDance Doubao Video Generation Foundation Model - Seaweed <i>ByteDance Seed Team (Mar 2024 - Nov 2024)</i>	[Blog] [Video] [Website]
Tiktok AI-moji <i>Virtual Avatar Team (Jul 2023 - Dec 2024)</i>	[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 <i>Proc. IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2023</i>	[Paper] [Webpage]
HairNet: Hairstyle Transfer with Pose Changes Peihao Zhu , Rameen Abdal, John Femiani, Peter Wonka <i>Proc. European Conference on Computer Vision (ECCV), 2022</i>	[Paper] [Webpage]
CLIP2StyleGAN: Unsupervised Extraction of StyleGAN Edit Directions Rameen Abdal, Peihao Zhu , John Femiani, Niloy Mitra, Peter Wonka <i>SIGGRAPH Conference Proceedings, 2022</i>	[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 <i>International Conference on Learning Representations (ICLR), 2022</i>	[Paper] [Webpage]
Barbershop: GAN-based Image Compositing using Segmentation Masks Peihao Zhu , Rameen Abdal, John Femiani, Peter Wonka <i>ACM Transactions on Graphics (Proc. SIGGRAPH Asia), 2021</i>	[Paper] [Webpage]
Improved StyleGAN Embedding: Where are the Good Latents? Peihao Zhu , Rameen Abdal, Yipeng Qin, John Femiani, Peter Wonka <i>ArXiv pre-print, 2021</i>	[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>