

# Peihao Zhu

peihao.zhu@kaust.edu.sa | Google Scholar | <https://zpdesu.github.io>

## WORK EXPERIENCE

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

## EDUCATION

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

## PROJECTS

<b>ByteDance Video Generation Foundation Model - Unicorn (Development Phase)</b> <i>ByteDance Seed Team: PixelDance × Seaweed (Dec 2024 - present)</i>	
<b>ByteDance Video Generation Foundation Model - Seaweed</b> <i>ByteDance Seed Team (Mar 2024 - Nov 2024)</i>	<a href="#">[Blog]</a> <a href="#">[Video]</a> <a href="#">[Website]</a>
<b>Tiktok AI-moji</b> <i>Virtual Avatar Team (Jul 2023 - Dec 2024)</i>	<a href="#">[Blog]</a> <a href="#">[Platform]</a>

## PUBLICATIONS

<b>3DAvatarGAN: Bridging Domains for Personalized Editable Avatars</b> Rameen Abdal, Hsin-Ying Lee, <a href="#">Peihao Zhu</a> , Menglei Chai, Aliaksandr Siarohin, Peter Wonka, Sergey Tulyakov <i>Proc. IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2023</i>	<a href="#">[Paper]</a> <a href="#">[Webpage]</a>
<b>HairNet: Hairstyle Transfer with Pose Changes</b> <a href="#">Peihao Zhu</a> , Rameen Abdal, John Femiani, Peter Wonka <i>Proc. European Conference on Computer Vision (ECCV), 2022</i>	<a href="#">[Paper]</a> <a href="#">[Webpage]</a>
<b>CLIP2StyleGAN: Unsupervised Extraction of StyleGAN Edit Directions</b> Rameen Abdal, <a href="#">Peihao Zhu</a> , John Femiani, Niloy Mitra, Peter Wonka <i>SIGGRAPH Conference Proceedings, 2022</i>	<a href="#">[Paper]</a> <a href="#">[Webpage]</a>
<b>Mind the Gap: Domain Gap Control for Single Shot Domain Adaptation for Generative Adversarial Networks</b> <a href="#">Peihao Zhu</a> , Rameen Abdal, John Femiani, Peter Wonka <i>International Conference on Learning Representations (ICLR), 2022</i>	<a href="#">[Paper]</a> <a href="#">[Webpage]</a>
<b>Barbershop: GAN-based Image Compositing using Segmentation Masks</b> <a href="#">Peihao Zhu</a> , Rameen Abdal, John Femiani, Peter Wonka <i>ACM Transactions on Graphics (Proc. SIGGRAPH Asia), 2021</i>	<a href="#">[Paper]</a> <a href="#">[Webpage]</a>
<b>Improved StyleGAN Embedding: Where are the Good Latents?</b> <a href="#">Peihao Zhu</a> , Rameen Abdal, Yipeng Qin, John Femiani, Peter Wonka <i>ArXiv pre-print, 2021</i>	<a href="#">[Paper]</a> <a href="#">[Webpage]</a>

## **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**

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- 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**

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### **Prof. Peter Wonka**

Full Professor, Visual Computing Center, KAUST  
[peter.wonka@kaust.edu.sa](mailto:peter.wonka@kaust.edu.sa)  
<http://peterwonka.net>