

Ondřej Texler

PERSONAL DATA

Affiliation: GenAI Researcher, [HeyGen](#)
Place of stay: Los Angeles, California, USA
Immigration: Green Card holder
(NIW, National Interest Waiver)
Date of birth: 9th October 1992
E-mail: ondrej.texler@gmail.com
LinkedIn: <https://www.linkedin.com/in/ondrej-texler>
www: <https://ondrejtexler.github.io>



RESEARCH SUMMARY

My entire research career has been revolving around generating realistically looking content given certain conditions, ranging from painterly images, animated stylized videos, to expressive photorealistic avatars with believable and controllable motion. I hold PhD in Computer Graphics, published over 10 papers at top venues such as CVPR or SIGGRAPH, have been cited over 250 times, have GitHub repositories with over 600 stars and 100 forks, co-invented 9 patents, created proof-of-concepts helping to raise multi-million seed round, shipped and released computer vision models and novel rendering pipelines currently generating millions of dollars in ARR, peer-reviewed tens of papers, won prizes such as the Best in Show Award at Real-Time Live SIGGRAPH or Joseph Fourier Prize, and gave invited talks and interviews at SIGGRAPH Now, ECCV, or BBC News.

EDUCATION

Doctoral degree study (PhD) **2018 – 2021**
Computer Graphics, Czech Technical University in Prague.
Advised by [Prof. Daniel Sýkora](#)

Master degree study (MSc) **2016 – 2018**
Computer Science, Czech Technical University in Prague.

Bachelor degree study (BSc) **2012 – 2016**
Computer Science, Czech Technical University in Prague.

PROFESSIONAL EXPERIENCE

GenAI Researcher, HeyGen, Los Angeles **4/2024 – present**
Research of core avatar rendering technology. Developed a prototype deferred neural rendering pipeline, shipped several GAN-based avatar rendering models, including a novel scheme for fast training of highly-realistic and expressive avatars, researched UNet-based and transformer-based diffusion models, unlocking multi-million revenue streams.

Founding Research Scientist, Drip Artificial, California **2/2023 – 4/2024**
(Rebranded as [comfy.org](#)) Leading the research efforts into developing an end-to-end Generative AI framework that allows for creating stylized videos based on a text prompt; in particular, text-to-video synthesis, example-based video style transfer, and propagating edits through the video sequence.

Senior Research Scientist, Samsung Research America, California **3/2021 – 4/2023**
Research and implementation of computer vision and deep learning techniques to render photorealistic virtual humans, focusing on faces. Involved conditional GANs, image-to-image translation networks, deferred neural rendering. Part of the [NEON](#) project. Resulted in 9 patents and one CVPR publication.

Intern Research Scientist, Samsung Research America, California **4/2020 – 2/2021**
Research and implementation of various image-to-image and video-to-video translation neural networks for face manipulation, e.g., adding makeup, changing skin tone, adding or removing scars or wrinkles. Part of the [NEON](#) project.

Intern Research Scientist, Snap Inc., Los Angeles, California **7/2019 – 10/2019**
Research of new techniques on training generative adversarial networks for style transfer tasks; focused on a scenario where a minimal amount of data is available, and an interactive response is required. Furthermore, developing a shader-based real-time stylization for human portraits.

- Remote Collaboration, Adobe Research, USA** **9/2017 – 12/2019**
 Remote collaboration on several research projects, publications, and tech transfer project. Computer graphics; patch-based style transfer; neural-network-based style transfer.
- Intern Research Scientist, Adobe Research, Seattle, Washington.** **7/2018 – 10/2108**
 Combining neural-network-based and patch-based style transfer methods. Chunk-based style transfer method with a focus on real-time performance.
- Intern Research Scientist, Adobe Research, San Jose, California** **9/2017 – 12/2107**
 Guiding patch-based style transfer method using convolutional neural networks, image harmonization, and histogram optimization. Integrating developed style transfer method into Adobe Photoshop.
- Software Engineer, Dynavix, Prague, Czechia** **5/2014 – 9/2017**
Software & Algorithm Engineer. Developing map-navigation app for smartphones. C++, Java, Objective-C, C#.
- Software Engineer, World of Warcraft game server, Prague, Czechia** **2/2013 – 5/2014**
Software & Algorithm Engineer. The World of Warcraft game server. Extending game mechanics, scripting artificial intelligence, data-mining. C++, C#.

PUBLICATIONS

- D. Kunz, **O. Texler**, D. Mould, and D. Sýkora: **Meet-In-Style: Text-driven Real-time Video Stylization using Diffusion Models.** *IEEE Computer Graphics and Applications* (March 2025)
- Y. Wang, I. Molodetskikh, **O. Texler**, and D. Dinev: **3D Engine-ready Photorealistic Avatars via Dynamic Textures.** *arXiv/2503.14943* (March 2025)
- S. Ravichandran, **O. Texler**, D. Dinev, and HJ. Kang: **Synthesizing Photorealistic Virtual Humans Through Cross-modal Disentanglement.** *IEEE/CVF Conference on Computer Vision and Pattern Recognition* (CVPR 2023, June 2023)
- A. Texler, **O. Texler**, M. Kučera, M. Chai, and D. Sýkora: **FaceBlit: Instant Real-time Example-based Style Transfer to Facial Videos.** In *Proceedings of the ACM in Computer Graphics and Interactive Techniques*, 4(1):14 (I3D'21, April 2021)
- F. Hauptfleisch, **O. Texler**, A. Texler, J. Křivánek, and D. Sýkora: **StyleProp: Real-time Example-based Stylization of 3D Models.** In *Computer Graphics Forum*, 39(7):575–586 (Pacific Graphics 2020)
- O. Texler**, D. Futschik, M. Kučera, O. Jamriška, Š. Sochorová, M. Chai, S. Tulyakov, and D. Sýkora: **Interactive Video Stylization Using Few-Shot Patch-Based Training.** In *ACM Transactions on Graphics*, 39(4):73 (SIGGRAPH 2020, August 2020) **Featured at RealTime Live @ SIGGRAPH 2020, won Best in Show Award.**
- O. Texler**, D. Futschik, J. Fišer, M. Lukáč, J. Lu, E. Shechtman, and D. Sýkora: **Arbitrary Style Transfer Using Neurally-Guided Patch-Based Synthesis.** In *Computers & Graphics*, 87:62–71 (January 2020)
- O. Jamriška, Š. Sochorová, **O. Texler**, M. Lukáč, J. Fišer, J. Lu, E. Shechtman, and D. Sýkora: **Stylizing Video by Example.** In *ACM Transactions on Graphics*, 38(4):107 (SIGGRAPH 2019, Los Angeles, California, July 2019)
- O. Texler**, J. Fišer, M. Lukáč, J. Lu, E. Shechtman, and D. Sýkora: **Enhancing Neural Style Transfer using Patch-Based Synthesis.** In *Proceedings of the 8th ACM/EG Expressive Symposium*, pp. 43–50 (Expressive 2019, Genoa, Italy, May 2019)

D. Sýkora, O. Jamriška, **O. Texler**, J. Fišer, M. Lukáč, J. Lu, and E. Shechtman: **StyleBlit: Fast Example-Based Stylization with Local Guidance**. In *Computer Graphics Forum*, 38(2):83–91 (Eurographics 2019, Genoa, Italy, May 2019)

O. Texler and D. Sýkora: **Example-Based Stylization of Navigation Maps on Mobile Devices**. In *Proceedings of the 22nd Central European Seminar on Computer Graphics.*, (CESCG 2018, Smolenice, Slovakia, 2018)

SELECTED
PATENTS

O. Texler, D. Dinev, A. Gupta, H.J. Kang, A. Liot, S. Ravichandran, S. Sadi: **Hierarchical Model-based Generation of Images**, *US Patent US17/967,868*, December 2023

S. Ravichandran, A. Liot, D. Dinev, **O. Texler**, H.J. Kang, J. Palan, S. Sadi: **Creating Images, Meshes, and Talking Animations from Mouth Shape Data**, *US Patent US17/967,872*, December 2023

S. Ravichandran, D. Dinev, **O. Texler**, A. Gupta, J. Palan, H.J. Kang, A. Liot, S. Sadi: **Multimodal Disentanglement for Generating Virtual Human Avatars**, *US Patent US18/296,202*, January 2024

D. Dinev, **O. Texler**, S. Ravichandran, J. Palan, H.J. Kang, A. Gupta, A. Unnikrishnan, A. Liot, S. Sadi: **End-to-end System for Synthesizing Talking Virtual Human Avatars**, *US Patent App. 63/436,058*, December 2022

H.J. Kang, S. Ravichandran, **O. Texler**, D. Dinev, A. Liot, S. Sadi: **Architecture for Using 1D Inputs in Image-2-Image Translation Networks**, *US Patent App. 63/436,211*, December 2022

D. Dinev, S. Ravichandran, H.J. Kang, **O. Texler**, A. Liot, S. Sadi: **High-fidelity Neural Rendering of Images** *US Patent App. 63/461,199*, January 2024

A. Liot, A. Unnikrishnan, S. Sadi, S. Banerjee, V. Gokul, J. Palan, H.J. Kang, **O. Texler**: **Cache-based Content Distribution Network** *US Patent App. 63/453,825*, January 2024

R. Lokesh, S. Banerjee, H.J. Kang, **O. Texler**, S. Sadi: **Lightweight Rendering System with on-device Resolution Improvement** *US Patent App. 63/456,337*, January 2024

SELECTED
TALKS &
INTERVIEWS

SIGGRAPH Now 2021, invited talk, [link](#)

2d3d.ai, invited talk, 2021, [link](#)

BBC News Arabic, interview, 2020, [link](#)

RealTime Live!, session at SIGGRAPH 2020, [link](#)

ECCV 2020, short oral, [link](#)

SIGGRAPH 2020, paper session, [link](#)

Expressive 2019, paper session

EuroGraphics 2019, paper session

CESCG 2018, paper session

REVIEW
SERVICES

CAG 2025, Computers & Graphics

Queios 2025

AI4CC @ CVPR 2024, AI for Content Creation Workshop

CAG 2024, Computers & Graphics

CTU in Prague 2024, Thesis Reviewer

WACV 2024, IEEE/CVF Winter Conference on Applications of Computer Vision

CAG 2023, Computers & Graphics

TVCG 2022, IEEE Transactions on Visualization and Computer Graphics

SIGGRAPH Asia 2022, ACM Transactions on Graphics

SIGGRAPH 2022, ACM Transactions on Graphics

SIGGRAPH Asia 2021, ACM Transactions on Graphics

Pacific Graphics 2021, Computer Graphics Forum

AWARDS

Joseph Fourier Prize Laureate, 2021
Best in Show Award, Real-Time Live, SIGGRAPH 2020

STUDENT

A. Moravcová, MSc, CTU in Prague

SUPERVISION

A. Sternwaldová, MSc, CTU in Prague