# Ondřej Texler

Contact Department of Computer Graphics and Interaction

Faculty of Electrical Engineering Information Czech Technical University in Prague

Karlovo náměstí 13, 121 35 Prague 2, CZ

Personal Data

Date of birth: 9th October 1992

E-mail: ondrej.texler@gmail.com

Nationality: Czech

LinkedIn: https://www.linkedin.com/

in/ondrej-texler

www: https://ondrejtexler.

github.io



**EDUCATION** 

#### Doctoral degree study (PhD)

2018 - Present

Computer Graphics, Faculty of Electrical Engineering, Czech Technical University in Prague. Dissertation Thesis: Example-based Style Transfer.

#### Master degree study (MSc)

2016 - 2018

Computer Science, Faculty of Information Technology, Czech Technical University in Prague. Master Thesis: Digital Image Processing and Image Stylization.

#### Bachelor degree study (BSc)

2012 - 2015

Computer Science, Faculty of Information Technology, Czech Technical University in Prague. Bachelor Thesis: Architecture design and implementation of a large software system.

High school 2004 - 2012

Mathematics, Physics, and Descriptive Geometry specialization, Gymnasium of Christian Doppler.

Professional EXPERIENCE

Intern Research Scientist, Samsung Research America, California 4/2020 - PresentResearch & Development. Research on image-to-image and video-to-video translation neural networks.

#### Intern Research Scientist, Snap Inc., Los Angeles, California

7/2019 - 10/2019

Research & Development. 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

Research & Development. 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 - 10/2108Research & Development. 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

Research & Development. Guiding patch-based style transfer method using convolutional neural networks, image harmonization, and histogram optimization. Integrating developed style transfer method into Adobe Photoshop.

Software Architect and Developer, Dynavix, Prague, Czechia 5/2014 – 9/2017

Software Architecture & Development. The navigation application for smartphones, tablets, and PND devices. C++, Java (Android), JavaEE, Objective-C (iOS), C#.

Software Developer, World of Warcraft game server, Prague, Czechia 2/2013 – 5/2014 Software & Database Development. The World of Warcraft game server. Extending game mechanics, scripting artificial intelligence, data-mining. C++, C#.

#### **Publications**

- 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)
- 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)

COMPUTER
SCIENCE &
PROGRAMMING
SKILLS

#### Academic / Research & Development

4 years of conducting research and publishing of scientific papers.

#### Computer Graphics / Computer Vision

4 years of academic and practical experience (shaders, CUDA, OpenCV).

#### Deep Learning / Convolutional Neural Networks / GANs

2 years of practical and theoretical experience (PyTorch, NumPy, SciPy).

#### Software Architecture & Development

6 years of practical experience.

#### C/C++11/14

*Proficient.* 7 years of practical experience.

## Java, Android

Proficient. 6 years of experience in Java; 5 years of experience in Android.

## Python

Advanced. 2 year of practical experience; machine learning, data-science.

# C#, Objective-C

Intermediate. 2 years of practical experience.

STUDENT CTU in Prague:

SUPERVISION A. Moravcová (MSc), A. Sternwaldová (MSc)

NATIONAL Czech language: Native speaker

Language: English language: Fluent
Russian language: Beginner