Lukas Uzolas

Delft | Netherlands
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Education

PhD | **CGV - Computer Science** May. 2022 – ongoing
TU Delft Delft, Netherlands

- Computer Graphics, 3D Computer Vision, Machine Learning
- Supervised by Petr Kellnhofer & Elmar Eisemann

M.Sc. | **Image Processing and Computer Vision** Sep. 2019 – Sep. 2021
PPCU, UAM, UBx Hungary, Spain, France

- Erasmus Mundus Master Degree conducted at three universities
- Thesis: Meta-Learning for Domain Generalization with Style-based Parameter Prediction in Biomedical Image Segmentation [thesis]

B.Sc. | **Human-Computer-Interaction** Oct. 2015 – Jun. 2019
University of Hamburg Hamburg, Germany

- Computer Science and Psychology

B.Sc. | **Business and Psychology** Sep. 2014 – Sep. 2015
eufom Hamburg, Germany

- After a year of study, I switched to Computer Science due to a stronger interest

Experience

Master Thesis Research Intern (Remote) Feb. 2021 – Jun. 2021
VCG SEAS, Harvard University Boston, USA

- Reseach internship to conduct my Master's thesis at the Visual Computing Group, Harvard University

Summer Research Intern Jul. 2020 – Sep. 2020
Medical Engineering Development & Innovation Center Madrid, Spain

- Research and implementation of algorithms extracting features from eye imagery with high speed cameras

Working Student Software Development Oct. 2017 – Feb. 2019
Senacor, **Daimler AG**, **BOOM GmbH** Hamburg & Stuttgart, Germany

- Involved in multiple projects at various companies
- Responsible for conceptualization and implementation of Fullstack and Backend applications

Teaching & Supervision

Thesis Co-supervision Oct. 2023 - ongoing
TU Delft Delft, Netherlands

- Co-supervision of multiple B.Sc. and M.Sc. thesis projects

Teaching Assistant in Applied Image Processing Sep. 2022 - ongoing
TU Delft Delft, Netherlands

- Supervision of practical sessions, grading, creation of assignments (M.Sc. course)

Student Supervisor in Software Development Oct. 2016 – July. 2017
University of Hamburg Hamburg, Germany

- Teaching object-oriented programming to students, supervision and examination of student's homework, preparation of educational materials (B.Sc. course)

Awards and Honours

Honours M.Sc. Degree in IPCV Sep. 2021
Honours degree in Image Processing and Computer Vision

Erasmus Mundus Master Scholarship Sep. 2019
Fully funded graduate studies with an acceptance rate below 5 percent

Outstanding B.Sc. Degree in HCI Jun. 2019
Best Human-Computer-Interaction degree in the summer semester of 2019

Publications

MotionDreamer: Exploring Semantic Video Diffusion features for Zero-Shot 3D Mesh Animation, 3DV 2025 [paper]
Lukas Uzolas, Elmar Eisemann, Petr Kellnhofer

Template-free Articulated Neural Point Clouds for Reposable View Synthesis, NeurIPS 2023 [paper]
Lukas Uzolas, Elmar Eisemann, Petr Kellnhofer

Deep Anomaly Generation: An Image Translation Approach of Synthesizing Abnormal Banded Chromosome Images, IEEE Access 2022 [paper]
Lukas Uzolas*, Javier Rico*, Pierrick Coupé, Juan C. SanMiguel, and György Cserey

Scale & Walk: Evaluation of scaling-based interaction techniques for natural locomotion in VR, Mensch und Computer 2018 [paper (German)]
Boysen, Yannic*; Husung, Malte*; Mantei, Timo*; Müller, Lisa-Maria*; Schimmelpfennig, Joshua*; Uzolas, Lukas*; Langbehn, Eike;
Original title (German): Evaluation von skalierungsbasierten Interaktionstechniken zur natürlichen Fortbewegung in VR

**equal contribution*

Coding Proficiency

I have worked with the following languages and frameworks amongst others:

Python (PyTorch, Tensorflow, Numpy, Pandas, scikit-learn, OpenCV, etc.), **C++**, **NodeJS**, **Javascript** (Vue.JS), **Java**, **C#**, **Matlab**, **Unity**, **Racket**, **AWS**, **SQL** (MySQL), **NoSQL** (MongoDB), **HTML**, **CSS**, **Git**, **slurm**, **Linux**