Lars Schnyder

Projects, details and more on www.l4rs.ch/cv

MOTIVATION

Systems connecting your everyday life with the most sophisticated technologies have always fascinated me. Therefore, development of advanced skills and gaining profound knowledge in the areas of computer graphics, computer vision and artificial intelligence have become the primary motivation for my work and studies.

EDUCATION

ETH, Zürich — Msc in Computer Science, www.ethz.ch

2008 - 2012 : Visual Computing

Thesis: Composition, Mixing and Overlay in Stereo 3D

BFH TI, Biel — Bsc in Computer Science, www.ti.bfh.ch

2005 - 2008 : Computer Perception & Virtual Reality

Thesis: Augmented Reality (AR) Bone Viewer

EXPERIENCE

GoPro, Zürich CH, www.gopro.com

Sept 2017 - now: Senior Development Engineer

- Stereo perception and temporal filtering pipeline
- UAV integration, embedded Linux
- Algorithm optimization with OpenCL

Vizrt (LiberoVision), Zürich CH, www.vizrt.com

Feb 2017 - Aug 2017: Core Team Lead Jan 2016 - Jan 2017 : Senior Software Engineer Nov 2012 - Dec 2015 : Software Engineer

- Various approaches for automatic object detection, tracking and segmentation including neuronal networks
- Algorithm optimization with CUDA
- Student/Thesis Mentoring

Disney Research, Zürich CH, www.disneyresearch.com

Jun 2012 - Oct 2012 : Software Engineer 2010 - Jun 2012 : Research Assistant

- Advanced stereoscopic techniques and applications
- Automatic 2D/3D conversion of sports video
- Tech transfer

Kooaba AG, Zürich CH, www.kooaba.com

2008 - 2010 : Software Engineer

ISS AG, Port CH, www.iss-aq.ch

2006 - 2008 : Software Developer

SKILLS

Languages and Frameworks

C++, CUDA, OpenCL, OpenGL, OpenCV, Qt, ADB/Embedded, ROS, Matlab, Java

Field knowledge

Computer Graphics and Vision, Multiple View Geometry, AR, Computational Photo- & Videography, Advanced Stereoscopic 3D Techniques

Development Experience

Agile/SCRUM, Test-Driven Development, MVC, Git, HG/Mercurial, Jenkins, Windows (MSVC) and Unix (GCC), GPU/CPU Profiling

LANGUAGES

German (Native) English (Fluent) French (Good) Spanish (Beginner)

PUBLICATIONS

Depth Image Based Compositing for Stereo 3D - 3DTV-CON 2012

Disparity-aware Stereo 3D Production Tools

- CVMP 2011

2D to 3D Conversion of Sports Content using Panoramas

- ICIP 2011

Augmented Reality Bone Viewer

- AK Akademiker Verlag 2011

PATENTS

Systems And Methods For Converting Video

- US 20130063549 A1

AWARDS

Disparity Visualization for Stereoscopic Videos Mentioned in Planes 2 Credits

- Disney 2014

Swisscom Innovation Award (3rd Prize) Composition, Mixing and Overlay in Stereo 3D

- Swisscom 2012

Best Student Paper Award (3rd Prize) 2D to 3D Conversion of Sports Content Using Panoramas

- ICIP 2011