

## Publications

01.2023 WACV	<b>Splatting-based Synthesis for Video Frame Interpolation</b> Simon Niklaus, Ping Hu, and Jiawen Chen <i>IEEE Winter Conference on Applications of Computer Vision</i>
01.2021 WACV	<b>Revisiting Adaptive Convolutions for Video Frame Interpolation</b> Simon Niklaus, Long Mai, and Oliver Wang <i>IEEE Winter Conference on Applications of Computer Vision</i>
01.2021 WACV	<b>Learned Dual-View Reflection Removal</b> S. Niklaus, X. Zhang, J. T. Barron, N. Wadhwa, R. Garg, F. Liu, and T. Xue <i>IEEE Winter Conference on Applications of Computer Vision</i>
06.2020 CVPR	<b>Softmax Splatting for Video Frame Interpolation</b> Simon Niklaus, and Feng Liu <i>IEEE Conference on Computer Vision and Pattern Recognition</i>
11.2019 TOG	<b>3D Ken Burns Effect from a Single Image</b> Simon Niklaus, Long Mai, Jimei Yang, and Feng Liu <i>ACM Transactions on Graphics</i>
06.2018 CVPR	<b>Context-aware Synthesis for Video Frame Interpolation</b> Simon Niklaus, and Feng Liu <i>IEEE Conference on Computer Vision and Pattern Recognition</i>
10.2017 ICCV	<b>Video Frame Interpolation via Adaptive Separable Convolution</b> Simon Niklaus, Long Mai, and Feng Liu <i>IEEE International Conference on Computer Vision</i>
07.2017 CVPR	<b>Video Frame Interpolation via Adaptive Convolution</b> Simon Niklaus, Long Mai, and Feng Liu <i>IEEE Conference on Computer Vision and Pattern Recognition</i>

## Work Experience

12.2019 - Present Research Scientist	<b>Adobe</b> in San Jose <i>Investigating new algorithms related to novel view synthesis using deep learning.</i>
07.2019 - 11.2019 Research Intern	<b>Google</b> in Mountain View <i>Investigated the use of dual views for learning-based reflection removal.</i>
03.2018 - 06.2019 Research Intern	<b>Adobe</b> in San Jose <i>Created the first Moving Stills prototype to synthesize the 3D Ken Burns effect.</i>
10.2012 - 03.2013 Software Engineering Intern	<b>Fresenius</b> in Schweinfurt <i>Created a monitoring and analysis tool for debugging embedded multiprocessor systems.</i>
09.2011 - 02.2012 Software Engineering Intern	<b>Fraunhofer</b> in Nürnberg <i>Created a monitoring tool for Android and iOS to analyze embedded environments.</i>

## Academic Record

09.2015 - 03.2020 Doctor of Philosophy Computer Science	<b>Portland State University</b> with a 4.0 GPA <table><tr><td>Adviser</td><td>Feng Liu</td></tr><tr><td>Thesis</td><td>Novel View Synthesis in Time and Space</td></tr><tr><td>Instructor</td><td>CS 510 - Intro to Visual Computing CS 542 - Advanced Artificial Intelligence CS 565 - Full Stack Web Development</td></tr><tr><td>Google Summer of Code</td><td>2017 - Organization Admin for Portland State University 2016 - Student Mentor for Portland State University</td></tr></table>	Adviser	Feng Liu	Thesis	Novel View Synthesis in Time and Space	Instructor	CS 510 - Intro to Visual Computing CS 542 - Advanced Artificial Intelligence CS 565 - Full Stack Web Development	Google Summer of Code	2017 - Organization Admin for Portland State University 2016 - Student Mentor for Portland State University
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03.2014 - 03.2015 Master of Science Computer Science	<b>Portland State University</b> with a 4.0 GPA <table><tr><td>Adviser</td><td>Bart Massey</td></tr><tr><td>Teaching Assistant</td><td>CS 684 - Algorithm Design and Analysis CS 399 - Special Studies / New Beginnings CS 201 - Computer Systems Programming</td></tr></table>	Adviser	Bart Massey	Teaching Assistant	CS 684 - Algorithm Design and Analysis CS 399 - Special Studies / New Beginnings CS 201 - Computer Systems Programming				
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03.2013 - 03.2016 Master of Science Information Systems	<b>University of Applied Sciences Würzburg</b> with a 4.0 GPA <table><tr><td>Adviser</td><td>Frank Deinzer</td></tr><tr><td>Thesis</td><td>Image Fusion for Novel View Synthesis</td></tr></table>	Adviser	Frank Deinzer	Thesis	Image Fusion for Novel View Synthesis				
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10.2009 - 03.2013 Bachelor of Engineering Computer Science	<b>University of Applied Sciences Würzburg</b> with a 4.0 GPA <table><tr><td>Adviser</td><td>Eberhard Gräßl</td></tr><tr><td>Thesis</td><td>Debugging Tools for Embedded Multiprocessor Systems</td></tr><tr><td>Junior Assistant</td><td>CS 17 - Introduction to Databases CS 12 - Languages and Compiler Design CS 10 - Algorithms and Data Structures CS 06 - Introduction to Computer Science</td></tr></table>	Adviser	Eberhard Gräßl	Thesis	Debugging Tools for Embedded Multiprocessor Systems	Junior Assistant	CS 17 - Introduction to Databases CS 12 - Languages and Compiler Design CS 10 - Algorithms and Data Structures CS 06 - Introduction to Computer Science		
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## Honors and Awards

09.2018 - 09.2019 Fellowship - 27000 Dollar	<b>Maseeh Fellowship</b> at PSU <i>Awarded to outstanding graduate students in the college.</i>
09.2017 - 09.2018 Award - 7500 Dollar	<b>Laurels Graduate Award</b> at PSU <i>An award to competitively selected, academically meritorious graduate students.</i>
07.2017 Award - 400 Dollar	<b>Marie Brown Travel Award</b> at PSU <i>A travel stipend to recognize outstanding work of graduate degree students.</i>
03.2011 - 03.2015 Fellowship - 14400 Euro	<b>Deutschlandstipendium</b> at FHWS <i>A monthly financial support to high achieving students based on academic merit.</i>
03.2013 Award - 600 Euro	<b>Wolfgang Maria Fischer Award</b> at FHWS <i>A monetary honor awarded to the best graduates in computer science.</i>

## Community Service

09.2007 - 03.2014 Volunteering	<b>Lifeguard at the Wasserwacht</b> in Schweinfurt <i>A voluntary lifeguard service that is part of the German Red Cross.</i>
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