

# Hannes Hergeth

## Curriculum Vitae

### Education

- 2017–2019 **Master of Computer Science**, *RWTH Aachen University*, Germany.  
Current Grade – 1.7 (equivalent to GPA 3.8)
- 2017–2018 **Erasmus Student**, *École Polytechnique Fédérale de Lausanne*, Switzerland.  
Two Erasmus semesters at EPFL.  
1st place in the Advanced Computer Graphics rendering competition.
- 2012–2017 **Bachelor of Computer Science**, *RWTH Aachen University*, Germany.  
Grade – 2.4 (equivalent to GPA 3.5), Minor in Business Administration  
Thesis: Extending Adaptive Progressive Photon Mapping to Participating Media  
Supervisor: Professor Leif Kobbelt, Grade – 1.0 (equivalent to GPA 4.0)
- 2009–2012 **High School**, *St. Leonhard Gymnasium*, Aachen, Germany.  
Grade – 1.6 (equivalent to US grade A), Majored in Mathematics and Computer Science
- 2008–2009 **High School**, *Dunstan High School*, Alexandra, New Zealand.  
International Year, Certificate of Merit for good academic performance

### Experience

- 2017 - 2018 **Research Assistant**, *EPFL Realistic Graphics Lab*, Lausanne, Switzerland.  
Research areas: Polarization in light transport simulation and physical measurements in a laboratory.  
Supervisor: Professor Wenzel Jakob.
- 2017 **Research Intern**, *Nvidia Advanced Rendering Center*, Berlin, Germany.  
5-month internship at Nvidia Research working on state-of-the-art light transport algorithms.  
Supervisor: Alexander Keller
- 2016–2017 **Research Assistant**, *Computer Graphics Group RWTH Aachen*, Germany.  
Research areas: Geometry Processing - Spline Fitting  
Implementing algorithms for fitting spline surfaces to polygonal meshes.  
Supervisors: Janis Born, Professor Leif Kobbelt
- 2013–2015 **Research Assistant**, *Computer Graphics Group RWTH Aachen*, Germany.  
Research areas: Geometry Processing - Quad Meshing  
Designing new algorithms for multiresolution quadrangulation of triangular meshes.  
Supervisors: Hans-Christian Ebke, Professor Leif Kobbelt
- 2011–2012 **Software Engineer**, *Ingenieurbüro Schemmel & Partner GbR*, Aachen, Germany.  
Designing and implementing validation software for train schedules.

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## Professional Service

SIGGRAPH Student Volunteer 2015 – 2017  
GCPR, VMV Student Volunteer 2015

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## Computer Skills

Tools Visual Studio, Eclipse, 3ds Max, Git, MATLAB, LaTeX  
Technologies Parallel Computing in CUDA, Direct3D 11  
Programming C++, C#, HLSL (GLSL)  
Languages

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## Projects

2012-ongoing **CudaTracerLib**: A CUDA library for rendering algorithms based on ray tracing. Includes implementations of Bidirectional Path Tracing, Volumetric Probabilistic Progressive Photon Mapping and Vertex Connection and Merging. <https://github.com/hhergeth/CudaTracerLib>  
2010-2012 **RisenEditor** A D3D11 level editor for a well-known German PC game which enables user modifications. Based on a small engine capable of hardware tessellation, deferred shading and other state-of-the-art algorithms.

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## Languages

German Mother tongue  
English Fluent, *Cambridge English: First (FCE)*  
French Basic words and phrases only

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## Interests

Landscape photography in combination with hiking