

Patrick Schmidt

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WORK EXPERIENCE

Visual Computing Institute, Aachen, Germany — *Research Assistant*

MAY 2017 – PRESENT (PhD Student)

Applying numerical optimization techniques to challenging geometric problems, e.g. surface parametrization and shape correspondence. Advisor: Professor Leif Kobbelt.

Autodesk, Cambridge, United Kingdom — *Software Engineering Intern*

JUNE 2016 – SEPTEMBER 2016

Worked on automatic quad mesh generation tools as part of a scrum team. Contributed to a C++ library that is used in e.g. ReMake, Fusion 360 and Maya.

RWTH Aachen University, Germany — *Student Research Assistant*

OCTOBER 2014 – MAY 2016

Designed and implemented a novel algorithm for user-guided surface parametrization.

FOERST Driving Simulators, Germany — *Software Engineering Intern*

MARCH 2011 – JULY 2011

Implemented a map editor as part of a commercial driving simulation software in C++.

EDUCATION

RWTH Aachen University — *M. Sc. Computer Science*

OCTOBER 2011 – MARCH 2017

GPA: 3.9. **Coursework:** Computer Graphics, Geometry Processing, Discrete Differential Geometry, Computer Vision, Convex Optimization, Operations Research.

PUBLICATIONS

Interactively Controlled Quad Remeshing of High Res. 3D Models

Hans-Christian Ebke, **Patrick Schmidt**, Marcel Campen, Leif Kobbelt
SIGGRAPH ASIA 2016

TEACHING EXPERIENCE

RWTH Aachen University, Germany — *Teaching Assistant*

Basic Techniques in Computer Graphics (2017 - present): Giving tutorials and substitute lectures, supervising student TAs, designing assignments and exams for ~250 students.

Current Topics in Computer Graphics (2017): Supervised literature seminar of 20 students.

Programming and Formal Systems, Automata, Processes (2012 - 2014): Gave weekly tutorials and graded homework assignments of ~20 students.

ADDITIONAL EXPERIENCE

ACM SIGGRAPH — *Student Volunteer Team Leader*

Student Volunteer (2015, 2016), Team Leader (2017, 2018, 2019): Managed ~400 volunteers as one of 22 team leaders. Juried application process, trained and supervised volunteers on-site.

GMP 2018, Aachen, Germany — *Conference Coordinator*

Lead preparation and on-site logistics of computer graphics conference with 90 attendees.

AWARDS & SCHOLARSHIPS

Berthold Vöcking Master Award for outstanding master thesis (2017).

Graduation with Honors
Awarded for GPA 3.9 and master thesis 4.0 (2017).

Germany Scholarship
Funding due to outstanding academic performance (2014 – 2016).

Dean's List for being among the top 5% of B.Sc. graduates (2014).

PROGRAMMING LANGUAGES & TOOLS

C++ (7 years), Python.
Prior experience: Matlab, Maple, Java, C#, PHP, HTML, CSS, JavaScript

SKILLS

Geometry Processing (Surface Parametrization, Quad Meshing), Computer Graphics, Numerical Optimization, Data Structures & Algorithms.
Basic knowledge: Computer Vision, Machine Learning

LANGUAGES

English: fluent
German: native

INTERESTS

Forró (Brazilian Partner Dance),
Sports (Wakeboarding)