Patrick Schmidt

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WORK EXPERIENCE

Visual Computing Institute, Aachen, Germany — *Research Assistant*
MAY 2017 – PRESENT (PhD Student)
Geometry processing, surface parametrization and mapping, numerical optimization.

Autodesk, Cambridge, United Kingdom — *Software Engineering Intern*
JUNE 2016 – SEPTEMBER 2016
Worked on automatic quad mesh generation tools as part of a scrum team.

RWTH Aachen University, Germany — *Student Research Assistant*
OCTOBER 2014 – MAY 2016
Designed and implemented a novel algorithm for user-guided quad remeshing.

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 — *B. Sc. and M. Sc. Computer Science*
OCTOBER 2011 – MARCH 2017
Coursework: Computer Graphics, Geometry Processing, Discrete Differential Geometry, Computer Vision, Convex Optimization, Operations Research.

PUBLICATIONS (first-authored)

Distortion-Minimizing Injective Maps Between Surfaces (SIGGRAPH Asia 2019)
Inter-Surface Maps via Constant-Curvature Metrics (SIGGRAPH 2020)
TinyAD: Automatic Differentiation in Geometry Processing Made Simple (Symposium on Geometry Processing 2022)
Surface Maps via Adaptive Triangulations (Eurographics 2023)

TEACHING EXPERIENCE

RWTH Aachen University, Germany
Supervised **B. Sc. and M. Sc. theses** in computer graphics and geometry processing.
Lecture **Basic Techniques in Computer Graphics** TA (2017 - present).
Practical **Geometry Processing and 3D Printing** TA (2021).
Seminar **Current Topics in Computer Graphics** (2017, 2022).
Lectures **Programming** and **Formal Systems, Automata, Processes** TA (2012 - 2014).

ADDITIONAL EXPERIENCE

International Journals and Conferences — *Reviewer*
Computers & Graphics (2019), ACM Transactions on Graphics (SIGGRAPH Asia 2020, SIGGRAPH 2022), SIGGRAPH Posters (2021), SIGGRAPH Conference Track (2022) Computer Animation and Virtual Worlds (2021, 2022), Computer Aided Geometric Design (2022).

ACM SIGGRAPH — *Student Volunteer Team Leader*
Student Volunteer (2015, 2016), **Team Leader** (2017, 2018, 2019): Managed ~450 volunteers as one of 18 team leaders at computer graphics conference with 18k attendees. Juried application process, trained and supervised volunteers on-site.

AWARDS & HONORS

Günter Enderle Best Paper Award at Eurographics 2023 (first author)

Best Paper Award (1st Place) at Symposium on Geometry Processing 2022 (first author)

Best Paper Award (1st Place) at Symposium on Geometry Processing 2021 (co-author)

Günter Enderle Best Paper Award (Honorable Mention) at Eurographics 2021 (co-author)

Berthold Vöcking Master Award for outstanding master thesis, 2017

Graduation with Honors M. Sc. at RWTH Aachen University, 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

LANGUAGES

English: fluent
German: native