AM OPENSOURCE FAN
STUDYING COMPUTER SCIENCE AND MATH

# DAVID STUTZ

RWTH STUDENT AND GEORGIA TECH ALUMNI COMPUTER VISION RESEARCH SCIENTIST WEB DEVELOPER, VIDEOGAME ENTHUSIAST, GUITARIST

# **CURRENTLY**

RWTH Aachen University M.Sc. in Computer Science

10/2014 - today, Aachen, GER

RWTH Aachen University Student Research Assistant

05/2015 - today, Aachen, GER

### CONTACT

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I am passionate about computer science – its versability, its origins in mathematics, its applications. Focusing on computer vision and machine learning, I combine the depth of theory with the most interesting applications of todays world.

# **EDUCATION**

**RWTH Aachen University** 

M.Sc. in Computer Science (expected 2016, 4.0 GPA) B.Sc. in Computer Science (with distinction, 4.0 GPA) *Thesis: Superpixel Segmentation using Depth Information.*\*

Advisor: Prof. Dr. Bastian Leibe

10/2011 - today, Aachen, GER

Georgia Institute of Technology Graduate Exchange Student (4.0 GPA)

01/2015 - 05/2015, Atlanta, GA

# **EXPERIENCE**

Computer Vision Group, RWTH Aachen University Student Research Assistant, Computer Vision

Evaluation and comparison of state-of-the-art superpixel algorithms.

Advisor: Prof. Dr. Bastian Leibe

05/2015 - today, Aachen, GER

Computational Perception Laboratory, Georgia Institute of Technology Visiting Graduate Student

Video segmentation using intrinsic characteristics and semantic segmentation of weakly-labeled video.

Advisor: Prof. Irfan Essa, Ph.D.

01/2015 - 05/2015, Atlanta, GA

#### MATHCCES, RWTH Aachen University

Tutor, "Fundamentals in Mathematics II", "Calculus for Computer Science" Responsibilities include presenting exercises to a group of 30-50 students and grading weekly homework as well as final exams.

10/2013 - 01/2014, 04/2014 - 09/2014, Aachen, GER

#### **RS** Computer

#### Web Developer

Development of themes and plugins for CMSimple and Wordpress; and conception, development as well as maintenance of individual web applications for medium-sized companies.

01/2009 - 03/2014, 10/2014 - 04/2015, Sinzig, GER

#### Fraunhofer FKIE Student Employee

Introduction to C++ and 3D modeling using Blender; development of an interactive web application based on PHP and JavaScript for complex database queries based on SQL; plugin development for Piwik; and data visualization using d3.js.

Advisor: Dr. Carsten Winkelholz

10/2009, 05/2011 - 07/2011, 03/2012, 08/2012 - 09/2012, Wachtberg, GER

# **AWARDS**

Accenture Future Technology Leaders Program 2015 Hans Hermann-Voss Scholarship 2015 Germany Scholarship 2014 – today RWTH Aachen University Dean's List 2012, 2013, 2014 careerloft.de Scholarship 2012 – today e-fellows.net Scholarship 2011 – today Germany Physical Society Book Price 2011 German Junior Academy 2005

# COURSEWORK\*

Computer Vision, Computer Vision 2, Machine Learning, Data Mining Algorithms, Statistical Techniques in Robotics, Probabilistic Graphical Models, Numerical Analysis, Numerical Analysis 2, Complexity Theory

# **MOOCS**

Linear and Integer Programming, Social Network Analysis, Game Theory, Cryptography, Introduction to Finance, Introduction to Operations Management

# PROJECTS\*

#### SEEDS Revised and Superpixels Revisited

Efficient implementation of SEEDS superpixels bundled together with recent superpixel algorithms including an extended version of the Berkeley Segmentation Benchmark for evaluation.

davidstutz.de/projects/superpixelsseeds/

Bootstrap Multiselect and Strength Meter Twitter Bootstrap plugins for user-friendtly select elements and password inputs.

davidstutz.de/projects/twitter-bootstrap/

### CMSimple News, Pictures and YouTube

CMSimple plugins for blogging and news articles, image galleries and sliders as well as YouTube video galleries.

davidstutz.de/projects/cmsimple/

Kohana Red, Green, Blue, Yellow and Gaps Kohana plugins for authentication, access control and form generation and validation.

davidstutz.de/projects/kohana/

# **SKILLS**

C/C++ (OpenCV, Point Cloud Library), MatLab, PHP, SQL, JavaScript (jQuery, d3.js), HTML, CSS/LESS, LaTeX, Git, Subversion, Mercurial

<sup>\*</sup> Bachelor thesis and additional source code available at github.com/davidstutz. Documents proving the above claims are given upon request.