I 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

davidstutz@web.de
davidstutz.de
github.com/davidstutz
twitter.com/david\_stutz

I am passionate about computer science – its versatility, 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 today's world.

Planning a career in academia, I am not only eager to acquire new knowledge, but also motivated to share this knowledge with other professionals as well as future generations.

### **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

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 of 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 using SQL; plugin development for Piwik; and data visualization using d3.js.

Advisor: Dr. Carsten Winkelholz, Francois Kruger

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 German Physical Society Book Price 2011

# COURSEWORK\*

German Junior Academy 2005

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

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-friendly 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++ (Boost, OpenCV, Point Cloud Library), Mat-Lab, PHP, SQL, JavaScript (jQuery, d3.js), HTML, CSS/LESS, LaTeX (TikZ), Maple, 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.