

# Curriculum Vitae / Résumé

## Personal Information:

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| Name:    | Mike Schaekermann   |
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## Education:

|               |  |
|---------------|--|
| 2016 (- 2018) | <b>University of Waterloo</b> (Canada), graduate student in the David R. Cheriton School of Computer Science; program: <b>Computer Science</b> ; pursued degree: Master of Mathematics; supervisors: <b>Dr. Edith Law</b> and <b>Dr. Lennart Nacke</b>   |
| 2011 - 2014   | <p>Salzburg University of Applied Sciences (Austria), undergraduate program <b>MultiMediaTechnology</b>, major in "Augmented Reality &amp; Game"; degree: Bachelor of Science in Engineering (final grade in oral exam: <b>"Pass with distinction"</b>; average grade over all written exams: <b>1.1</b> with 1 meaning "Excellent" and &gt; 4 meaning "Not Passed")</p> <p><b>Thesis title:</b> "<a href="#"><i>Implementation of a Collaborative Web Application for Annotating Gameplay Videos Based on Biometric Player Data</i></a>" (awarded grade "Excellent")</p> <p><b>Scholarships:</b> engineering scholarship (03/2013) and merit-based scholarship for foreign studies (02/2014), both awarded by the Economic Chamber of Salzburg; merit-based scholarship, awarded by Salzburg University of Applied Sciences (11/2014)</p> |
| 2009 - 2011   | University of Marburg (Germany), medical school; degree: first Staatsexamen (pre-clinical examination) in <b>Human Medicine</b> (percentage scored <b>88.2%</b> )  |
| 2000 - 2009   | Academic high school (Gymnasium an der Schweizer Allee), Germany; degree: <b>A level</b> (percentage scored <b>93.2%</b> )   |

## Employment History:

|             |  |
|-------------|--|
| 2013 - 2014 | Visiting Researcher at the Games and Media Entertainment Research Laboratory at University of Ontario Institute of Technology (UOIT), Oshawa, Canada, under the supervision of Prof. Dr. Nacke   |
| 2012 - 2013 | Tutor for applied mathematics (Salzburg University of Applied Sciences, Austria)   |
| 2011 - 2015 | Shareholder and co-founder of a startup company dealing with browser-based designs for 3D-printing (see <a href="https://stilnest.com/">https://stilnest.com/</a> ), received USD 1 mio. in seed funding in 08/2014 (see <a href="https://www.crunchbase.com/organization/stilnest">https://www.crunchbase.com/organization/stilnest</a> ) |
| 2009 - 2010 | Research assistant at core-unit "BrainImaging" at the university clinic for psychiatry and psychotherapy, Marburg (Germany)  |

## Selected Projects:

|               |   |
|---------------|---|
| since 01/2016 | <a href="#">CrowdEEG</a> : a framework to combine machine and human intelligence for the scalable and accurate analysis of human clinical EEG recordings. This is an active research project in the HCI CrowdLab at University of Waterloo, led by professor Edith Law. |
| 02-05/2014    | <a href="#">Rapidly</a> : a collaborative web application for annotating gameplay videos, based on physiological time series data; developed as part of <a href="#">my bachelor thesis</a> at Salzburg University of Applied Sciences.                                  |
| 09-12/2012    | 2nd final semester project: 2D strategy game for Microsoft PixelSense (multi-touch table), see <a href="http://github.com/mikeschaekermann/qpt2a">http://github.com/mikeschaekermann/qpt2a</a>  |
| 03-07/2011    | 1st final semester project: WebGL-based 3D-editor for 3D-printed objects, see <a href="http://portfolio.mediacube.at/projects/2012-jou/">http://portfolio.mediacube.at/projects/2012-jou/</a>   |
| 05-07/2010    | 3D Simulation of an Endocrine System (hypothalamic-pituitary-adrenal axis), see <a href="https://www.youtube.com/watch?v=Me999FGPc6c">https://www.youtube.com/watch?v=Me999FGPc6c</a>   |

## Technical Experience:

|                        |   |
|------------------------|---|
| Programming Languages: | C++, Java (4 yrs), C# and Assembler (1.5 yrs), Python (1 yr)  |
| Web Development:       | HTML5, CSS3, JavaScript, PHP, XML, SQL (8 yrs), MongoDB (3 yrs)   |
| Machine Learning / AI: | Linear Regression, Decision Trees, kNN, Bayesian Learning, Mixtures of Gaussians, Logistic Regression, Neural Networks; Uninformed, Informed, Local and Adversarial Search; Constraint Satisfaction Problems; Markov Decision Processes; Reinforcement Learning |
| Game Development:      | Game engine architecture, advanced collision detection  |
| Augmented Reality:     | Linear & non-linear filters, object tracking, feature point extraction (SIFT, SURF etc.)  |
| Computer Graphics:     | Programmable graphics pipeline, Open-/WebGL and GLSL  |

## International Experience:

|               |  |   |
|---------------|--|---|
| 2016 (- 2018) |  | International Masters Student at University of Waterloo, Canada   |
| 2013 - 2014   |  | Visiting Researcher at University of Ontario Institute of Technology, Oshawa, Canada (see Employment History above)               |
| 03-07/2012    |  | Participation in the support program for international students at Salzburg University of Applied Sciences ("B.U.D.D.Y." program) |
| 01-07/2007    |  | Stay abroad in Auckland, New Zealand, placement in a host family  |

## Language Skills:

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|----------------------------|------------------------------|
| English, German:           | fluent in speech and writing |
| French, Italian, Japanese: | basics                       |



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Mike Schaeckermann, 2016-02-01