

JESSICA VERENA “LENA” SCHULZE, Ph.D candidate

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EDUCATION

Ph.D. in Machine Learning

OKINAWA INSTITUTE OF SCIENCE AND TECHNOLOGY | Japan | Anticipated Completion: 2018

Thesis: Development of Bayesian machine learning algorithms for the inference of neural connectivity from large-scale 2-photon microscopy brain imaging data using functionally informed priors in Python.

B.Sc. in Cognitive Science

INSTITUTE OF COGNITIVE SCIENCE – UNIVERSITY OF OSNABRÜCK | Germany | 2012

Thesis: The Role of Affective Computing in Developmental Robotics

Core Areas of Study:

Artificial Intelligence • Computational Linguistics • Neuroinformatics • Computer Science

PROFESSIONAL EXPERIENCE

WHITEMATTER LABS, Berlin, Germany

07/2009 – 12/2011

Berlin-based startup responsible for development of neuroscientific driven attention prediction web service for clients including Google, Groupon, and Epson. (www.eyequant.com)

Software Engineer

- Gained and utilized in-depth knowledge of many aspects of daily software development, including unit testing, tool scripting, subversion control, content management systems, and bug-tracking systems.
- Drove increase to unit test coverage of company's Python code base to 98%.
- Developed and implemented successful online visualization tool for load statistics of systems utilizing Python and Google Charts API.
- Successfully automated various parts of service process.

EMERGENT ROBOTICS LABORATORY – Osaka University, Japan

02/2010 – 03/2010

One of leading robotics research labs in developmental robotics, led by Professor Minoru Asada. (www.er.ams.eng.osaka-u.ac.jp/asadalab)

Research Student

- Designed and implemented emotion recognition prototypes.

UNIVERSITY OF OSNABRÜCK, Germany

04/2007 – 07/2009

System Administrator (10/2008 – 07/2009)

- Provided first level support for Mac and Linux system users and mail system maintenance.

Research Assistant in Artificial Intelligence (04/2007 – 11/2008)

- Implemented spatial calculi in Prolog for use in reasoning regarding geometric analogies.
- Developed and launched visualization framework to effectively display Prolog-described geometric analogies using SVG and CGI.

CREAT CRL, Munich, Germany

11/2006 – 07/2007

Customer Support Engineer

- Provided second level support.
- Maintained databases in MySQL.
- Developed, wrote, and executed software tests.
- Created web pages in HTML and CSS.

TEACHING EXPERIENCE

OKINAWA INSTITUTE OF SCIENCE AND TECHNOLOGY, Japan

March 2016

Teaching Assistant

Presentation Skills (Science Challenge participants 2016)

INSTITUTE OF COGNITIVE SCIENCE, University of Osnabrück, Germany

Summers 2010 – 2012

Teaching Assistant

Cognitive Psychology I & II (Summer 2012)

Intro to Computational Linguistics & Natural Language Processing in Python (Summer 2010 & 2011)

SKILLS

Programming: Python, Prolog, Java, C, MySQL, PostgreSQL, HTML, CSS.

Operating Systems: OS X, Linux

Other: Photoshop, Latex

Languages: German (Native), English (Fluent), Japanese (Advanced), Mandarin (Basic)

VOLUNTEER EXPERIENCE

Co-Founder & Mentor, Okinawa Science Mentoring Program, 2013 – Present

Student Representative, Graduate Student Council, OIST, 2013 – 2015