Roman Schulte-Sasse

Data Scientist

data scientist | software engineer | machine learning scientist

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I am a passionate software developer and machine learning enthusiast, currently working in computational Biology. With my work, I want to make a difference and learn new things along the way.
I am amazed by nature and want to understand how these systems work.

EXPERIENCE

Student Research Assistant

Humboldt Universität zu Berlin -
August 2015 to December 2015

- Developed motion tracking system for ultrasound images in Matlab.
- The work led to a semi-automated tracking software that was used in scientific studies of tendon adaptation to training in the sports faculty of HU Berlin.

Student Research Assistant

Max Planck Institute for molecular Genetics -
January 2016 to November 2016

- I developed unsupervised deep learning framework to recognize patterns in DNA sequences as master thesis.
- I first got into touch with deep learning frameworks Theano and Tensorflow for that work.
- Worked on convolutional Restricted Boltzmann Machines (cRBMs) which are part of the earlier generation of deep learning models

Developer

FUmanoids - January 2013 to September 2015

- Developed localization framework for humanoid soccer robots
- Developed a machine learning approach for ball detection on the pitch (SVM based)
- Implemented basic machine learning models in the framework (support vector machines, neural networks, linear models)
- Programmed in C++ with own framework and focus on high performance

Intern

IVU Traffic Technologies - May 2009 to August 2009

- Helped in the build team
- First experience with subversion, maven, make

INTERESTS

Sports

- Beach Volleyball
- Skiing
- Hiking

SKILLS

Programming Languages

- Python ★★★★★
- R ★★★☆☆
- C++ ★★½☆☆
- Java ★★☆☆☆
- Matlab ★★☆☆☆

Languages

- German: Native ★★★★★
- English: Fluent ★★★★★
- French: Fluent ★★★★★

Communication

- Presentations ★★★★☆
- Scientific Writing ★★★☆☆

EDUCATION

PhD Program

Max Planck Institute for molecular Genetics
January 2017 - December 2020

I use machine learning models to learn about molecular mechanisms leading to disease. For my work, I use graph deep learning tools to find genes involved in cancer progression.

Master of Science

Freie Universität Berlin
2013 to 2016

Computer Science master during which I took courses on machine learning, image-processing and statistics.

Bachelor Computer Science

Freie Universität Berlin
2009 to 2013

I studied computer science and took courses on machine learning and computer vision