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# **Programming**



Python





Mathematica



Html/CSS/JS ArcGIS

BASH)

QGIS

Git/GitHub

GMT) Tensorflow PyTorch

# Languages

German English Italian \*\*\*\* French

# Expertise

seismic hazard analysis

IoT ] ground motion

machine learning

bayesian inference

### Certificates

Tensorflow

Developer, Data and Deployment, Advanced Techniques, Generative Adversarial Networks (GANs)

### Interests

Machine Learning
BooksMusic<sub>Heuristics</sub>
Philosophy<sub>Altaly</sub>
Web Development svchology Statistics Mindfulness

## Silvio**Schwarz** Geophysicist (B.Sc.)

### Education

2011 - 2019 **▼** Master of Science Universität Potsdam cancelled due to illness

(8 years) Earth Sciences

Focus: Geophysics, machine learning

Thesis:

1) Forecasting Macroseismic Intensities: A Sensitivity Study of a Bayesian Approach 2014-2016

2) Classification of eruptive tremor sources during the 2014-2015 Holuhraun sequence, Iceland 2019

2008 - 2011 **Bachelor of Science** 

Universität Potsdam

(3 years) Earth Sciences

Geology, Math, Physics, Chemistry

Thesis:

Simulation von Bodenbewegungsszenarien von Starkbeben (German)

2000 - 2008 Abitur (8 years)

Klosterschule Roßleben (staatl. Gymnasium)

Math, Geography

Thesis:

Naturkatastrophen und ihr Einfluss auf das Leben in der Gegenwart (German)

# Experience

2019 Student Researcher Universität Potsdam

(6 months) General Geophysics Group

Characterizing tremor sources during the Holuhraun eruption, Iceland

Supervision: Prof. Dr. Eva Eibl

2014 - 2015 Student Trainee Assecor GmbH, Berlin, Ger

Documentation of the power grid of Berlin, Germany for Vattenfall Europe Sales (11 months)

**GmbH** 

2013 - 2014 Student Trainee Assecor GmbH, Berlin, Ger

(5 months) Migration of the IT Infrastructure for BIOTRONIK SE & Co. KG

2012 Master Internship

(3 months)

Wolfram Alpha, Illinois, USA Example

Development of geophysical content for Wolfram | Alpha Supervision: Dr. Björn Zimmermann & Dr. Michael Trott

2011 - 2012

Student Researcher

Universität Potsdam

(1 year SSHAC LEVEL 3 PSHA model building and consulting

1 week consulting for Prof. Julian J. Bommer, Imperial College London 3 months)

Supervision: Prof. Frank Scherbaum

03/2011**Bachelor Internship**  Universität Leipzig

(1 month) Maintanance of the seismological Network of Saxony

Supervision: Dipl. Geophys. S. Funke

## **Projects**

#### **EQDist**

Calculation and visualization of source-to-site distances for ground motion modelling

### **TerremotoPi**

A RaspberryPi powered seismic station with real-time capabilities

### **TerrorXAfrica**

IBM cross-border effects challenge of armed conflicts at HackHPI2019