Silvio Schwarz

- 💼 Geophysicist (B.Sc.)
- 🏠 Potsdam, Germany
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Expertise

`ground motion` `seismology` `ArcGIS` `QGIS` `machine learning` `PERN` `probability`

Skills

Python
85%

R
70%

Git/GitHub
70%

Shell Scripting
70%

PERN
50%

Languages

German
100%

English
90%

Italian
50%
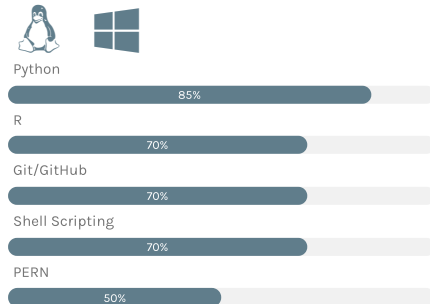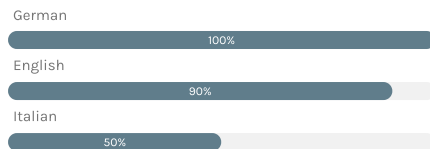
Certificates

Tensorflow
Developer, Data and Deployment, Advanced Techniques, GANs, NLP, MLOps

Google
Google IT Support

Stanford University
Machine Learning

IBM
IBM Full Stack-Cloudentwickler

Interests

Negotiation · Machine Learning · Books · Music · Heuristics · Philosophy · AI · Italy · Web Development · Python · Drums · Psychology · Running · Nature · Hiking · Guitar · Uncertainty · Piano · Bayesian Statistics · Mindfulness

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💼 Work Experience

Student Researcher — **Universität Potsdam**
📅 May 2019 - Oct 2019

Classification of eruptive tremor sources of Holuhraun sequence, Iceland
- signal processing of earthquake data
- fingerprinting seismograms of tremor with the FAST algorithm

Student NIS Specialist — **Assecor GmbH, Berlin**
📅 Aug 2014 - Jun 2015

maintenance of power grid documentation for Vattenfall Europe Sales GmbH
- topographically correct data entry in Smallworld GIS
- succesfully resolved conflicts in documentation

Student System Administrator — **Assecor GmbH, Berlin**
📅 Nov 2013 - Mar 2014

migration of IT Infrastructure to Windows 7 for BIOTRONIK SE & Co. KG
- remote client upgrade to Windows 7
- roll-out of update packages via remote server
- maintainance and upgrade of hardware components

Internship R&D — **Wolfram|Alpha, Champaign, USA**
📅 Sep 2012 - Nov 2012

develop geophysical content for Wolfram|Alpha [Click for Demo]
- collaborative development by using version control in Eclipse
- interactive calculation of seismic magnitude scales, earthquake characteristics, ground motion prediction and response spectra

Student Researcher — **Universität Potsdam**
📅 Jun 2011 - Aug 2012

seismological consulting for Council for Geoscience, Pretoria, South Africa
- interactive calculation of source-to-site distances of earthquakes
- established two new source-to-site metrics
- 1 week consulting for Prof. Julian J. Bommer, Imperial College London

Internship — **Universität Leipzig**
📅 Mar 2011

maintanance of the seismological network of Saxony
- configuration of ISDN routers through minicom/hyperterminal
- on-site collection of seismological data and maintanance of stations
- processing of 2010 Maule Earthquake data of for Dr. Klaus Bataille, Chile

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🎓 Education

GIS and Webmapping — **GIS Akademie Berlin**
📅 Feb 2022 - Sep 2022

ArcGIS, QGIS, Webmapping
- Georeferencing, Vector-/Rasterdata, Maplayout, Automation
- PyQGIS, PlugIn Creation, working with PostgreSQL/PostGIS
- HTML, CSS, JavaScript, PHP, openLayers, LeafletJS, GeoServer

Master of Science - Earth Science — **Universität Potsdam**
📅 Oct 2011- Sep 2019

Geophysics - 90/120 LP abgeschlossene Studienleistung
- Internship: Wolfram|Alpha. 2012
- 1. Thesis: Sensitivity Study of a Bayesian Approach. 2014-2016
- 2. Thesis: Classification of tremor sources during the Holuhraun sequence, Iceland. 2019

Bachelor of Science - Earth Science — **Universität Potsdam**
📅 Oct 2008 - Sep 2011

Geologie, Mathematik, Physik, Chemie
- Internship: Universität Leipzig. 2011
- Abschlussarbeit: Simulation von Bodenbewegungsszenarien von Starkbeben

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🔧 Projects

Terror X Africa — **HackHPI about://social.good**
📅 2019

22h hackathon: IBM cross-border effects challenge on armed conflicts

TerremotoPi
📅 2015 - current

seismic station with real-time capabilities bases on a Raspberry Pi

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