Damian Kula

Education

Oct 2017 - Present Doctor of Science in Seismology, Institut de Physique du Globe de Strasbourg,

Thesis title: Monitoring of deep reservoirs with ambient seismic noise,

Supervisors: Jerome Vergne, PhD. IPGS, Jean Schmittbuhl.

Keywords: Ambient Seismic Noise Interferometry, Python, Mass Processing, Data Science

Oct 2015 - Jul 2017 Master of Science in Geophysics, University of Silesia in Katowice,

Thesis title: Seismic noise analysis for purpose of Active Layer of Permafrost investiga-

tions in a region of Polish Polar Station in Hornsund, Svalbard, Supervisor: Dorota Olszewska, PhD. Institute of Geophysics, PAS.

Keywords: HVSR, Local effects, Python, ObsPy, Matlab, Git.

Oct 2012 - Jun 2015 Bachelor of Science in Geophysics, University os Silesia in Katowice,

Thesis title: Seismic network optimization in the LGCD area with use of simulated

annealing algorithm,

Supervisor: Maciej Mendecki, PhD. University of Silesia. Keywords: Matlab, Monte Carlo Sampling, D-optimum solution.

Experience

April 2017 - Sep 2017 Junior Java Programmer, ACC Cyfronet AGH.

Responsibilities Programming in Java with use of Spring, MongoDB, GWT, Angular. Programming in

Python with use of ObsPy, Numpy, Scipy.

May 2016 - Nov 2016 Intern, Institute of Geophysics, Polish Academy of Sciences.

Internship coordinator Dorota Olszewska, PhD.

Responsibilities Creating Python scripts to process seismic signal to apply HVSR method; Creating and

maintaining SQLite database of PGA parameters for LGCD region; Creating Python

scripts for solving different problems and tasks in the Institute

Jun 2015 – Jul 2015 Intern, , Institute of Geophysics, Polish Academy of Sciences.

Internship coordinator Dorota Olszewska, PhD.

Responsibilities Seismic signal processing in Matlab; HVSR method inplementation in Matlab

Jan 2015 - Oct 2017 Member of a scientific project, University of Silesia in Katowice.

Member of a project *Permafrost interaction as an environmental continuum between glacial and periglacial domain in Tarfala (Scandinavia) and Hornsund area, Spitsbergen* under leadership

of dr hab. Wojciech Dobiński, University of Silesia, Department of Earth Science. Participant of the Scientific Expedition to the Spitsbergen in Aug - Sep 2015

Responsibilities Preparing and conducting Electrical Resistivity Tomography surveys; Data processing

and interpretation

Programming

Python 3 years of experience Obspy, Scipy, Numpy, Matplotlib, Pandas, SQLalchemy

Java 1 year of experience Spring, Springboot, GWT

SQL 1 year of experience

Utilities Docker, Docker Compose, Apache Airflow, Git, Latex, Bash

Databases SQLite, PostgreSQL, MongoDB

Minor experience R, Matlab

Voluntary Services

Oct 2015 – Aug 2016 Organizing Committee Member.

7th International Geosciences Student Conference in Katowice, 11th -14th July 2016

Responsibilities Organization of worldwide sceintific conference for 150 students and young professionals

as a core member of organizing committee

Jan 2016 Volunteer, Biebrza National Park, Poland..

Responsibilities Data preparation, processing and preparing for publishing in form of maps using ArcGis

software.

Oct 2014 – May 2015 **Organizing Committee Leader**.

VIII Student Scientific Workshops Geosfera 2015 in Żory, 23-26th April 2015

Responsibilities Organization of scientific conference for 130 students as leader of organizing committee

Languages

Polish Native

English B2/C1 Certificates: English in Geophysics - Level C1

French Elementary Russian Elementary

Computer Skills

ArcGis Surfer

o Res2Diny

 Adobe Illustrator o MS Office

Grants and Awards

2016 — Best Student Poster Award of Session 18 during 35th General Meeting of European Seimological Commision, Trieste 2016

— Travel grant to participate in Advanced School on Seismology Beyond Textbooks & 35th General Meeting of European Seimological Commission, Trieste, 2016

2015 — Travel Grant to participate in Society of Exploration Geophysicists & Chevron Student Leadership Symposium, New Orleans, 2015.

2012 — Winner of the XVI Contest of Technical Knowledge 2012, organized by University of Silesia in Katowice(XVI Konkurs Wiedzy Technicznej).

Student Scientific Associations

Oct 2012 – Jul 2017 Student Science Association of Geophysicists PREM Positions: Vicepresident, Member Jan 2014 - Jul 2017 University of Silesia Student Chapter of the EAGE Positions: President

Jan 2015 – Jul 2017 University of Silesia Student Chapter of the SEG Positions: President, Vicepresident

Personal interests

- o Hiking, running, swimming, mountaineering, polar regions
- o Technology, IT, programming
- o Seismology, geophysics, statistics, data science