# 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,

Supervisor: Jerome Vergne, PhD. IPGS.

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

Oct 2015 – Aug 2016 Organizing Committee Member.

7<sup>th</sup> International Geosciences Student Conference in Katowice, 11<sup>th</sup> -14<sup>th</sup> July 2016

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

as a core member of organizing committee

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 – Present 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; Processing and

interpretation of acquired data; Publishing results

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

VIII Student Scientific Workshops Geosfera 2015 in Żory, 23-26<sup>th</sup> 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 A1

Russian A1

## Programming

Python 2 years of experience. Obspy, Scipy, Numpy, Matplotlib, Pandas, SQLalchemy

Java About 1 year of experience. Spring, Springboot, GWT

Matlab About 1 year of experience.

R Basics

Utilities Git, Latex, Bash, MongoDB

## Computer Skills

ArcGis (Certified with ECDL GIS) Surfer

Res2Dinv

o MS Office Adobe Illustrator

## **Voluntary Services**

Jan 2016 Biebrza National Park, Poland. Focused mostly on creating and preparing maps for publishing using ArcGis software.

#### Grants and Awards

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

— Travel grant to participate in Advanced School on Seismology Beyond Textbooks & 35<sup>th</sup> General Meeting of European Seimological Commision, 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

☑ contact@damiankula.pl

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

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