

Contact Information

Email

mareksmid711@gmail.com

Address

Souckova 17, Prague 17, 163
00, Czech rep.

Phone

00420777764333

Skills

- Computer skills: R, Python (Intermediate), Linux, Bash, CDO (Climate Data Operator), IDL (basics), ArcGIS, QGIS, SPSS Statistics, STATISTICA 10, ERDAS, ENVI
- Communication skills: In my JRC occupation, I was facilitating communication (written and spoken), with various partners in all levels including general public, policy makers and representatives of private sector such as UNCCD, FAO, Google, EEA and ESA.
- Organisational skills: As part of my PhD project I have participated on conduction of workshop entitled: "Spatial-Temporal Predictive Modeling with Open Source and Open Data for Urban Areas Kick – off Workshop". The event took a place as part of AAG (Association of American Geographers) Annual Meeting 2017 in Boston, USA.
- Languages: Mother tongue(S): Czech/Slovak, Other Language (s): English - fluent, Italian - basic, Spanish - basic

Marek Smid

Technically proficient geo and data scientist with experience in global time series analyses, climate modelling, smart cities, big data analyses and prediction of extremes. Experienced in handling high amounts of large multidimensional arrays and applying analytical /predictive methods varying from Machine Learning, over Geostatistics, to Extreme Value Theory.

Experience

The Joint Research Centre – European Commission (JRC-EC) Ispra (Italy)

● GIS developer

- Development and maintenance of GIS toolbox for map production and testing the map.
- Implementation of the WAD (World Atlas of Desertification) requirements for extraction of area specific spatial statistics of the various thematic WAD layers as input to WAD chapters by developing GIS scripts.
- Develop and test prototype for the processing of satellite time series for production of the land productivity dynamics map layer for the WAD.

The Joint Research Centre – European Commission (JRC-EC) Ispra (Italy) April-2013 March-2014

● Trainee

phenological analysis, integration of in-house data layers with WAD charter information layer, harmonization of large datasets, post processing, including scripting, and preparation of maps, preparation of data and maps for integration in the digital atlas format using web mapping environments

UK ENVIRONMENTAL AGENCY – GEOMATICS GROUP

Bath, (United Kingdom)
September-2012
March-2013

● Assistant of Geomatics Analyst

LIDAR data processing, Filtering, Ground truth validation, Pre-processing for flooding analysis, Coastal change analysis, Bathymetry, Project documentation

MISSION S.R.O

Prague (Czech Republic)
April-2010
December-2018

● GIS consultant

Network analysis – decision support for mobile billboard trucks advertising

Education

GEO-C, Marie Skodowska-Curie, European Joint Doctorate (consortia of University of Münster, Universidade NOVA de Lisboa, and Universitat Jaume I).
2018

● **PhD**

Each of the universities provided me with the supervision, namely Prof. Dr. Ana Cristina Costa, Prof. Dr. Edzer Pebesma, and Dr. Carlos Granell.

GEO-C is a multidisciplinary project, where under the umbrella of Geoinformatics and Smart Cities the various topics were addressed.

My reaserch topic: „Climate change and impacts on urban systems“.

One of the project deliverables is also the development of WebGIS platform, in order to share the results and develop the self-explaining visualizations understandable to wider public audience

CRANFIELD UNIVERSITY
Cranfield, (United Kingdom)
2012

● **MSc.**

Geographical Information Management (GIM)

main modules:

Advanced GIS Methods, Aerial Photography and Digital Photogrametry, GIS Fundamentals, Geographical Information Survey, Image Processing and Analysis, Physical Principles of Remote Sensing, Spatial Data and the Internet, Spatial Data Management

Thesis Project:

“Classification and Prediction Modelling (Data fusion)”.

CZECH UNIVERSITY OF LIFE SCIENCES, FACULTY OF ENVIRONMENTAL SCIENCES
Prague (Czech Republic)
2011

● **Ing. (equivalent to MSc.)**

Environmental Engeneering,

Main modules:

Ecology, GIS, Applied Remote Sensing, Carthography, Statistics, Applied economics, Environmental Impact Assessment, etc.

Publications

Šmid, M., & Costa, A. C. (2017). Climate projections and downscaling techniques. *International Journal of Urban Sciences*, 1-31.

Ranking of European Capitals According to the Impact of Future Heat Waves. Smid, M.; Russo, S.,Costa, A.; Pebesma, E.; Granell Canut, C.; In AGU Fall Meeting 2017. New Orleans, 11-15 Decembre 2017, USA.

A review of downscaling procedures a contribution to the research on climate change impacts at city scale. Smid, M.; Costa, A.; Pebesma, E.; Granell Canut, C.; and Bhattacharya, D. In EGU General assembly 2016. Vienna, 17-22 April 2016, volume 18, pages 6768, Vienna, Austria, 2016. EGU General Assembly 2016