


PERSONAL INFORMATION

Anna Seres



 69. Erzsébet setány, Miskolc 3517; Hungary

 +36-46-565-111/2390  +36-30-4026115

 anna.seres@gmail.com



 skype:

Sex female | Date of birth 10/09/1978 | Nationality Hungarian

Marital status unmarried partner Children 2 children

POSITION

Research fellow

WORK EXPERIENCE

2020-present

Research fellow

University of Miskolc, Hungary,
Faculty of Earth and Environmental Sciences and Engineering
Institute of Geography and Geoinformatics

2015-2020

Honorary associate professor

University of Miskolc, Hungary,
Faculty of Earth Science and Engineering
Institute of Geography and Geoinformatics

2008-2015

Assistant research fellow

University of Miskolc, Hungary,
Faculty of Earth Science and Engineering
Institute of Geography and Geoinformatics

- research, (snowpack and avalanche risk modelling, environmental modelling, digital soil mapping, land use mapping for correcting SRTM DEM, remote sensing based soil and geological mapping), giving lectures (vector and raster based GIS), writing educational material, managing and preparing projects

2007

Lecturer of geography in English language

Diosgyor Secondary School, Hungary

EDUCATION AND TRAINING

2018

Snow Science Winter School

SLF (WSL Institute for Snow andAvalanche Research), Col du Lautaret, France

- Learning state-of-the-art snow measurement techniques, understanding the physical processes responsible for the evolution of the snowpack and understanding vertically resolved snowpack models (Crocus, SNOWPACK)

2014

PhD

PhD in Earth Sciences

University of Miskolc, Hungary,

Mikoviny Sámuel Doctoral School of Earth Sciences

- Thesis: "Developing a snowpack, weather, terrain and land cover based avalanche risk model for the Low Tatras"

- 2004 **GIS and CAD professional skills course**
University of Miskolc, Hungary
 - ArcGIS, ERDAS, IDRISI, AutoCAD
- 2002-2005 **PhD scholarship**
University of Miskolc, Hungary, Mikoviny Sámuel Doctoral School of Earth Sciences
 - taking courses in GIS, statistics, physical geography, meteorology, engineering geology
 - teaching: GIS, geomorphology
- 2002 **MSc**
Certified Geographer, MSc
University of Miskolc, Hungary
Faculty of Earth Science and Engineering
 - Thesis: "The effects of terrain, snowpack and weather parameters on generation of avalanches, Low Tatras, Slovakia"
- 1997-2002 **Education at University of Miskolc**
Faculty of Earth Sciences and Engineering, University of Miskolc, Hungary
 - topics: engineering, geology, physical geography, human geography, GIS
- 2000 **Summer course**
Okanagan University College (UBC), Kelowna, Canada
 - Course: Applied Management of Mountain Hazards
 - Research topic: Determining the return frequency of avalanches from dendrochronological clues

PERSONAL SKILLS

Mother tongue(s)	Hungarian				
Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
	Hungarian State Language exam, advanced "C" level				
German	B1	B1	A2	A2	A2
	University course exam				

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

- Communication skills**
 - Good communication skills gained through my experience in
 - giving lectures at the university
 - giving talks at avalanche courses
 - giving presentations at conferences
 - organizing cooperation between project partners for several international projects
- Organisational / managerial skills**
 - organization skills (organized the cooperation between project partners, organized conferences)
 - managerial skills (took part in managing several projects)
 - team working ability (worked in international projects)
 - leadership (Vice-chair of Hungarian Federation of Sleddog Sports for 3 years)
- Job-related skills**
 - ability to solve complex research problems (developed a very complex environmental model for PhD research)
 - educational skills (giving lectures at university and secondary school)
- Computer skills**
 - ESRI ArcGIS; Leica Erdas Imagine 9.3; MultiSpec; Golden Software Grapher, Didger, Surfer, MapViewer; Microsoft Office; Adobe Photoshop, SPSS
 - intermediate programming skills in Python language
 - ability to construct complex environmental models

- Other skills
- skills in sleddog racing, horse riding, mountaineering, rock climbing
 - avalanche training
 - experience with farm animals, gardening, artistic skills

- Driving licence
- driving licence in B and B+E categories

 ADDITIONAL INFORMATION

- Projects
- 2022-: CRM-geothermal Horizon Europe programme: creating and maintaining the database on well, fluid, rock and reservoir, with an emphasis on critical raw materials for Europe and North Africa for the GIS based Fluid Atlas
 - 2020-2022: REFLECT (Redefining geothermal fluid properties at extreme conditions) H2020: Setting up the database on wells, fluids, reservoirs and rock types, creating the GIS based European Fluid Atlas
 - 2015-2018: COST Action ES1404 A European network for a harmonised monitoring of snow for the benefit of climate change scenarios, hydrology and numerical weather prediction. Management Committee member from Hungary. Short term scientific mission with Snow and Mountain Research Center of Andorra about snowpack modelling for 2015/2016.
 - .2010-2011: TAMOP Creating digital teaching materials, improving e-learning in the field of environmental sciences, engineering and informatics
 - Creating a digital educational material with interactive elements and multimedia content in „Raster based GIS systems”
 - 2009-2012: GS Soil: „Assessment and strategic development of INSPIRE compliant Geodata-Services for European Soil Data” ECP-2008-GEO-318004.
 - Soil data harmonization for Europe
 - 2008-2011: SOTER (SOil and TERRain Digital Database) EU 7th FWP, ENV.2007.4.1.3.3.„Regional pilot platform as EU contribution to a Global Soil Observing System”
 - Creating forest cover maps by classifying Landsat imagery for a sample area of Europe for the purpose of correcting the SRTM DEM. Creating soil parent material maps with a 2 step classification of satellite imagery. First step: supervised classification of Landsat images based on geological maps, SRTM DEM and soil maps. Second step: using the results of the first step as training areas, classifying MODIS images for Central-Europe, UK, Morocco and South-China. Creating soil maps by classifying MODIS images based on different soil descriptive parameters. (ArcMap, ArcInfo, ERDAS, MultiSpec)
 - 2006-08: INTERREG IIIA HUSKUA 05/02/404, “Természetvédelmi és természeti területek kezelését megalapozó kutatás a történelmi Bodroghözben.” Environmental research, establishing the management of nature protected areas in the Bodroghoz (Hungary/Slovakia)
 - Creating a cross border, harmonized geological database and GIS map for a sample area in Hungary/Slovakia
 - 2002-03: Phare HU-00008-02-04 04 „A felnőttoktatás és az életfogytig tartó tanulás lehetőségeinek javítása. ESZA-típusú projekt a képzésből a munka világába való átmenet támogatására.” Improving the possibilities of lifelong learning, adult education, supporting the transition from education to work. GIS course.
 - Co-author of a practice guide about vector and raster based GIS applications

- Conferences**
- 2018. Towards a better harmonization of snow observations, modeling and data assimilation in Europe, Budapest, Hungary (poster)
 - 2018. International Snow Science Workshop, Innsbruck, Austria (presentation, poster)
 - 2012. Advances in Avalanche Forecasting, Slovakia (presentation)
 - 2012. European Federation of Geologists: Managing Natural Hazards Workshop, Canary Islands, Spain (presentation)
 - 2012. Magyar Talajtani Társaság Vándorgyűlése, Miskolc, Hungary (co-author)
 - 2011. HunDEM 2011 GIS Conference, Miskolc, Hungary (presentation)
 - 2011. HunDEM 2011 GIS Conference, Miskolc, Hungary (co-author)
 - 2010. V. Hungarian Conference on Geography, Pecs, Hungary (presentation)
 - 2010. Digital Soil Mapping Workshop, Rome, Italy (co-author)
 - 2009. HunDEM 2009, GIS Conference, Miskolc, Hungary (presentation)
 - 2009. V. Environmental Science Conference of the Carpathian Basin, Cluj Napoca, Romania (presentation)
 - 2005. MicroCAD, International Scientific Conference, Miskolc, Hungary (presentation)
 - 2004. HunDEM 2004, Hungarian GIS Conference, Miskolc, Hungary (presentation)
 - 2003. MicroCAD International Scientific Conference, Miskolc, Hungary (presentation)
 - 2002. Forum of PhD students, Miskolc, Hungary (presentation)
 - 2003. Forum of PhD students, Miskolc, Hungary (presentation)
 - 2001. Hungarian Conference on Geography, Szeged, Hungary (poster)
 - 2001. XXV. National Scientific Student Conference, Pecs, Hungary (presentation)
- Honours and awards**
- 2001. Hungarian State Student Award
 - 2001. University gold medal for outstanding results
 - 2000. University silver medal for outstanding results
- Memberships**
- member of organizing and scientific committee of workshop: Towards a better harmonization of snow observations, modelling and data assimilation in Europe, Budapest 30 - 31 October 2018
 - member of Management Committee of COST Action ES1404: A European network for a harmonised monitoring of snow for the benefit of climate change scenarios, hydrology and numerical weather prediction.
 - LinkedIn professional groups (Avalanche Professionals, Snow and Ice Management Association, Snow and Avalanches)
 - 2015-2016 member of Association of Polar Early Career Scientists (APECS)
 - 2010-2014: member of HSZJSE, Ice and Rock Climbing Club of Hámor (the local climbing club)
 - 2008-2011: Vice-chair of FSSH, Federation of Sleddog Sports, Hungary (Since 2010 Hungarian Dogsport Federation)
 - 2008-2010: Chair of Kamcsatka Sleddog Sport Club
 - OeAV member
- Given lectures**
- Raster based GIS applications, course at MSc and BSc level
 - Assisting in courses: geomorphology, meteorology, management of natural hazards, regional geography
- Supervising**
- Supervisor of MSc thesis : "Vertisolok, a duzzadó-zsugorodó agyagtalajok azonosítása és területi lehatárolása archív talajadatok felhasználásával a Berettyó-Körösvidék területén" Identification and spatial delineation of vertisols based on historical data at Berettyó-Körösvidék, Hungary, at Szent István University, Gödöllő, Hungary

Products and Publications

5 most important publications and products

- Products:
 - AvalMap – a snowpack, weather, terrain and land cover based avalanche hazard model for the Low Tatras, Slovakia (2013)
 - Small scale hydrologic model including DEM, land cover, soil characteristics (water infiltration rate and capacity) for the threshold validation of drainage ditches in Sajoszentpeter, Hungary (2017)
 - Digital educational material with interactive elements and multimedia content in „Raster based GIS systems” (2011)
- Publications:
 - SERES, A. 2018. modelling snow redistribution by wind – Low Tatras, Slovakia, ISSW 2018 Conference proceedings
 - SERES, A. 2018. AvalMap – a snowpack, weather, terrain and land cover based avalanche hazard model for the Low Tatras, Slovakia, ISSW 2018 Conference Proceedings
 - DOBOS, E., SERES, A., VADNAI, P., MICHELI, E., FUCHS, M., LÁNG, V., BERTÓTI, R.D., & KOVÁCS, K. 2013. Soil parent material delineation using MODIS and SRTM data. Hungarian Geographical Bulletin. Vol 62. No 2. 133-156
 - SERES, A. 2012 Snow avalanche risk model, generating daily updated, high resolution danger maps in Managing Natural Hazards, European Federation of Geologist workshop, 2012 .05. 10-11. Canary Islands, Spain
 - DOBOS,E., SERES, A., BOCK, M., KÖTHE, R., DAROUSSIN, J. AND VINCENT VAN ENGELN. 2010 Landform mapping for SOTER at scale 1:1 million using SRTM-DEM, World Congress of Soil Science, Brisbane. Australia. 2010. 08. 1-6.