



Lecturer (Assistant Professor)
Energy Storage Systems Dynamics

Lancaster University
Department of Engineering
Energy Lancaster

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Co-founder
Workshops, Modeling

ARC initiative
Engineering System Design through
Participation · Collaboration · Sustainability

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Blogger
Data Visualization

Personal Website
English data blog
Hungarian data blog

Data Science
Dataactivism
Social Networks

profile

Data Science

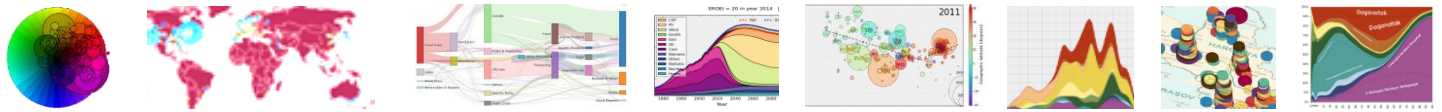
Data Analysis & Data Mining
Data Visualization & Infographics
Dataactivism & Data blogs: EN | HU

Energy & Sustainability

Biophysical Economics & Net Energy Analysis
Sustainable Energy Transitions
Renewables & Water-Energy-Food Nexus

Simulation Modeling

Game theory & Networks
Agent-based modeling & Complex systems
Systems Thinking & System Dynamics



education

PhD in Interdisciplinary Engineering

2013 – 2016
 Masdar Institute of Science and Technology, Abu Dhabi, UAE
degree offered in collaboration with **Massachusetts Institute of Technology (MIT)**, USA
Focus areas: Sustainable Energy Transitions, Data Science, Energy Flows Modeling
exchange semester at **Massachusetts Institute of Technology (MIT)**, USA
Focus areas: Energy systems & Climate change modeling, Nonlinear dynamic systems

MSc in Engineering Systems & Management

2011 – 2013
 Masdar Institute of Science and Technology, Abu Dhabi, UAE
degree offered in collaboration with **Massachusetts Institute of Technology (MIT)**, USA
Focus areas: Object Oriented System Dynamics, Sustainable Aviation

BSc (honors) in Electrical Systems Engineering

2007 – 2011
 Technical University of Cluj-Napoca, Cluj-Napoca, Romania, *Head of Class, Best Thesis*
co-signed by **Western Macedonia University of Applied Sciences**, Greece
Specialization: Electrical Systems, Focus areas: Numerical Methods, Electromagnetism

2003 – 2007
Márton Áron High School – Miercurea Ciuc, Romania, *98.4 / 100, Head of Class*

skills

Python AnyLogic
D3.js data APIs
Javascript Teaching
HTML + CSS Vensim
D3plus Sankeys
Excel VBA Data mining

languages

Hungarian (native)
Romanian (as native)
English (as native)
French (intermediate)
German (intermediate)

experience & research

7 years experience as Research Assistant } link
4 years experience as Teaching Assistant } link
8 months spent as visiting student/researcher
3+ years in development with ARC initiative - link
2+ years in data analysis and visualization - link
2 journal articles, 2 expected } link
5 conference presentations } link
1 book, 1 book chapter } link

Research websites: [SET](#) | [Food](#) | [Conflict](#) | [Development](#)

involvement

Development

Through my organization, **ARC initiative**, I have participated in, organized and led educational workshops on sustainability and renewable energy in developing regions, in India, Indonesia, Malaysia, Tanzania and Somaliland.

Dataactivism

My data analyses have been featured by UNDP, UNHCR, the GDELT project and Kantar Information Is Beautiful Awards.

activities

4 DAN Shotokan Karate, 3 DAN Kendo
2 World & 4 European Championships with **Romanian National Kendo Team**
Stok Kangri (6153)
Mont Blanc (4809)
Traveling (visited 50+ countries, lived in 4)

