

Energy Storage Systems Dynamics

Lancaster 🍱

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Sustainable Energy & Development

Engineering System Design through

Participation · Collaboration · Sustainability





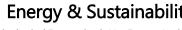












Game theory & Networks

Data Analysis & Data Mining **Data Visualization & Infographics** Datactivism & Data blogs: EN 3 HU 3

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

Simulation Modeling

Agent-based modeling & Complex systems **Systems Thinking & System Dynamics**

Data Science

Energy & Sustainability

Blogger **Data Visualization**

Personal Website English data blog Hungarian data blog

Data Science Datactivism Social Networks



1+ years Ast Prof

7y Research Ast 4y Teaching Ast

4y Development 3v Data Science

PhD thesis MSc thesis ⊃

BSc thesis ⊃



4 DAN black belt in **Shotokan Karate** 3 DAN in **Kendo**

2 World & 4 Euro Championships

Climbed Mont Blanc Stok Kangri 6153m

Visited 50 countries Lived in 5 on 3 cont



10+ peer-reviewed articles in journals including Nature

RG: 15.3 h-index: 3

PI on 2 research grants, Co-I on 3

Research featured in Times, Quartz, with over **100,000 reads**

 $\mathbf{A} \mid \mathbb{R}^{\mathsf{G}} \mid \mathfrak{A}^{\mathsf{I}}$

shops on sustainability and renewable energy in Malaysia, Indonesia, Tanzania, India, Somaliland. ZFEP jury member

Educational work-

1000 blog followers

Live workshops on dataviz, datactivism

My data analyses have been featured by UNDP, UNHCR, the GDELT project and Kantar Info **Beautiful Awards**

Pro in D3, D3plus, Seaborn, Bokeh, PowerBI, superset, HTML + CSS + JS



Pro in Python, Pandas, NumPy

Dynamics **AnyLogic**

My agent-based

3 of the 10

categories on

__anylogic*

& system dynamics As native: simulation models t EN, HU, RO Medium: FR, DE runthemodel.com 30+ presentations **Ecosystem& Social** around the world

Languages

Pro in impress.js, slides.com, live



Dénes is an assistant professor in *Energy* Storage Systems Dynamics with Energy Lancaster and an independent consultant in data science and energy. His research interests include system dynamics, energy transitions, energy storage, data visualization, data mining, machine learning, AI and agent-based modeling.

He is a well-known researcher in the field of sustainable energy transitions and biophysical economics. With a PhD in Interdisciplinary Engineering Masdar Institute, in collaboration with MIT, his research has been published in Nature and it has been featured in The Times. He currently leads an energy data analytics project at Lancaster University.

When not in front of the computer, Dénes roams the mountains of the Himalaya and the jungles of Africa to hold workshops on sustainability and renewable energy. His datactivism blog Try something new. Everyday. Is followed by 1000, exploring topics in development through story-telling with data.

