Dénes Csala
Try something new. Everyday.
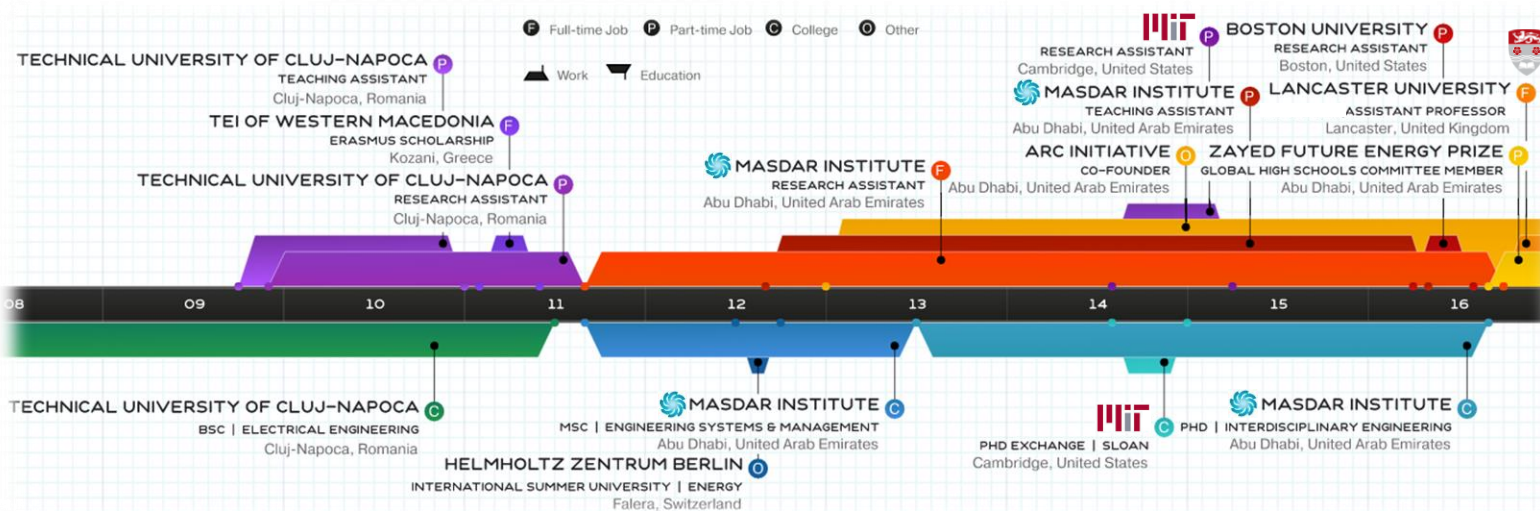
Energy & Sustainability
Biophysical Economics & Net Energy Analysis
Sustainable Energy Transitions
Renewables & Water-Energy-Food Nexus
Simulation Modeling
Game theory & Networks
Agent-based modeling & Complex systems
Systems Thinking & System Dynamics
Data Science
Data Analysis & Data Mining
Data Visualization & Infographics
Datactivism & Data blogs: EN ↪| HU ↪

Assistant Professor
Energy Storage Systems Dynamics

Lancaster University
Department of Engineering
Energy Lancaster

+44 7398 483468
d.csala@lancaster.ac.uk

LANCASTER University

Co-founder
Sustainable Energy & Development

ARC initiative
Engineering System Design through
Participation · Collaboration · Sustainability

+971 55 618 3205
denes@arc-initiative.org

arc initiative

Blogger
Data Visualization

Personal Website
English data blog
Hungarian data blog

Data Science
Datactivism
Social Networks

Career timeline (2008–2016)

- **F** Full-time Job **P** Part-time Job **C** College **O** Other
- ⬛ Work ⬛ Education

TECHNICAL UNIVERSITY OF CLUJ–NAPOCA — TEACHING ASSISTANT — Cluj-Napoca, Romania
TEI OF WESTERN MACEDONIA — ERASMUS SCHOLARSHIP — Kozani, Greece
TECHNICAL UNIVERSITY OF CLUJ–NAPOCA — RESEARCH ASSISTANT — Cluj-Napoca, Romania
MASDAR INSTITUTE — RESEARCH ASSISTANT — Abu Dhabi, United Arab Emirates
ARC INITIATIVE — CO-FOUNDER — Abu Dhabi, United Arab Emirates
ZAYED FUTURE ENERGY PRIZE — GLOBAL HIGH SCHOOLS COMMITTEE MEMBER — Abu Dhabi, United Arab Emirates
MIT — RESEARCH ASSISTANT — Cambridge, United States
BOSTON UNIVERSITY — RESEARCH ASSISTANT — Boston, United States
MASDAR INSTITUTE — TEACHING ASSISTANT — Abu Dhabi, United Arab Emirates
LANCASTER UNIVERSITY — ASSISTANT PROFESSOR — Lancaster, United Kingdom

TECHNICAL UNIVERSITY OF CLUJ–NAPOCA — BSC | ELECTRICAL ENGINEERING — Cluj-Napoca, Romania
HELMHOLTZ ZENTRUM BERLIN — INTERNATIONAL SUMMER UNIVERSITY | ENERGY — Falera, Switzerland
MASDAR INSTITUTE — MSC | ENGINEERING SYSTEMS & MANAGEMENT — Abu Dhabi, United Arab Emirates
MIT — PHD EXCHANGE | SLOAN — Cambridge, United States
MASDAR INSTITUTE — PHD | INTERDISCIPLINARY ENGINEERING — Abu Dhabi, United Arab Emirates

Professional · Personal · Research · Projects · Visualizations · Models · Presentations

---

Professional
1+ years **Ast Prof**
7y Research Ast
4y Teaching Ast
4y Development
3y **Data Science**

PhD thesis ↪
MSc thesis ↪
BSc thesis ↪

Personal
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

Research
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

Projects
Educational work-shops on sustain-ability and **renewable energy** in Malaysia, Indonesia, Tanzania, India, Somaliland.

ZFEP **jury member**

1000 blog followers

Live workshops on **dataviz, datactivism**

Visualizations
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

Models
My agent-based & system dynamics **simulation models** top 3 of the 10 categories on **runthemodel.com** Ecosystem& Social Dynamics **AnyLogic**

Pro in **Python, Pandas**, NumPy

Presentations
Languages
As native:
EN, HU, RO
Medium: FR, DE

30+ presentations around the **world**

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* from *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**.