Dénes Csala
Try something new. Everyday.

Graduate Research Assistant
Sociotechnical Sustainable Transitions

Masdar Institute of Science and Technology
Institute Center for Smart & Sustainable Systems
Engineering Systems & Management

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Co-founder
Workshops, Modeling

ARC initiative
Engineering System Design through
Participation · Collaboration · Sustainability

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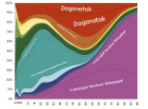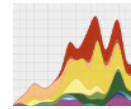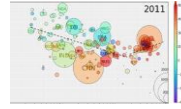denes@arc-initiative.org
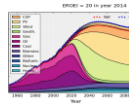
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profile

Data Science	Energy & Sustainability	Simulation Modeling
Data Analysis & Data Mining	Biophysical Economics & Net Energy Analysis	Game theory & Networks
Data Visualization & Infographics	**Sustainable Energy Transitions**	Agent-based modeling & Complex systems
Datactivism & Data blogs: EN ➲ | HU ➲	Renewables & Water-Energy-Food Nexus	**Systems Thinking & System Dynamics**

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education

2013 – 2016

PhD in Interdisciplinary Engineering
<u>Masdar Institute of Science and Technology</u>, Abu Dhabi, UAE
degree offered in collaboration with <u>Massachusetts Institute of Technology (MIT)</u>, USA
Focus areas: Sustainable Energy Transitions, Data Science, Energy Flows Modeling

Sep – Dec 2014
exchange semester at <u>Massachusetts Institute of Technology (MIT)</u>, USA
Focus areas: Climate change modeling, Nonlinear dynamic systems,

2011 – 2013
3.63 / 4.00
MSc Thesis ➲

MSc in Engineering Systems & Management
<u>Masdar Institute of Science and Technology</u>, Abu Dhabi, UAE
degree offered in collaboration with <u>Massachusetts Institute of Technology (MIT)</u>, USA
Focus areas: Object Oriented System Dynamics, Sustainable Aviation

2007 – 2011
9.15 / 10.00
BSc Thesis ➲

BSc (honors) in Electrical Engineering, Electrical Systems
<u>Technical University of Cluj-Napoca</u>, Cluj-Napoca, Romania, *Head of Class*, *Best Thesis*
co-signed by <u>Western Macedonia University of Applied Sciences</u>, Greece
Specialization: Electrical Systems, Focus areas: Numerical Methods, Electromagnetism

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

skills

Python	AnyLogic
D3.js	UN data APIs
Javascript	Teaching
HTML + CSS	Vensim
D3plus	Sankeys

languages

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

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experience & research

7 years experience as **Research Assistant**
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 ➲

- 1 journal article, 3 expected
- 5 conference presentations
- 1 book, 1 book chapter
} link ➲

Research websites: <u>SET</u> \| <u>Food</u> \| <u>Conflict</u> \| <u>Development</u>

involvement

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

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

activities

Martial arts
Trekking
Stok Kangri
Mont Blanc

4 DAN <u>Shotokan Karate</u>, **3 DAN** <u>Kendo</u>
2 World & 4 European Championships
with <u>Romanian National Kendo Team</u>

Traveling (visited **40+** countries, lived in **4**)