



**Denes Csala**  
Try something new. Everyday.

## Graduate Research Assistant Sociotechnical Sustainable Transitions

Masdar Institute of Science and Technology  
*Institute Center for Smart and 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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### interests



#### Data

Dataactivism  
Data Science & Data Mining  
Data Visualization & Infographics

#### Sustainability

Sustainable Energy Transitions  
Water-Energy-Food Nexus  
Systems Thinking & System Dynamics

#### Development

Teaching sustainability in developing regions  
Colorful development, HDI analysis  
Energy, Sustainability and Development

### education

2013 –



Sep – Dec  
2014



2011 – 2013

3.63 / 4.00

MSc Thesis ➔



2007 – 2011

9.15 / 10.00

BSc Thesis ➔

2003 – 2007

#### pursuing PhD in Interdisciplinary Engineering

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 for Energy Flows Modeling*  
exchange semester at Massachusetts Institute of Technology (MIT), USA  
*Focus areas: Climate change modeling, Nonlinear dynamic systems,*



#### MSc in Engineering Systems & Management

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 Engineering, Electrical Systems

Technical University of Cluj-Napoca, Cluj-Napoca, Romania, *Head of Class, Best Thesis*  
co-signed by Technological Educational Institute of Western Macedonia, Kozani, Greece  
*Specialization: Electrical Systems, Focus areas: Numerical Methods, Electromagnetism*

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

### skills



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

### languages



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

### experience & research

6 years experience as Research Assistant } link ➔  
3 years experience as Teaching Assistant }  
7 months spent as visiting student/researcher  
2+ years in development with ARC initiative - link ➔  
2+ years in data analysis and visualization - link ➔

1 journal article, 3 expected

4 conference presentations

1 book, 1 book chapter

link ➔



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

### involvement

#### ARC

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

### activities

Martial arts  
Trekking  
Stok Kangri  
Mont Blanc

4 DAN Shotokan Karate, 3 DAN Kendo  
2 World & 4 European Championships  
with Romanian National Kendo Team

Traveling (visited 40+ countries, lived in 4)



#### Blog

I lead the data blog Try something new. Everyday. exploring topics in development through data analysis and visualization.

### objective

My objective is to contribute to the advancement of sustainability, development and equity through science, applied and virtual community outreach. Scientific research, data visualizations, analyses and interactive models are my tools for this mission and I am not afraid of getting my hands dirty.

