

Iza Romanowska

Complexity Science, Computational Modelling, Archaeology, Computational Social Science

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simulatingcomplexity.wordpress.com

RECENT EDUCATION AND CURRENT EMPLOYMENT

2020 Research Fellow, Aarhus Institute of Advanced Studies, Denmark

Working on an individual research project combining data analytics with simulation modelling of ancient demographics.

2016–2020 Senior Researcher, Barcelona Supercomputing Center, Spain

Research: Data analysis of archaeological and associated data, agent-based simulations of socio and socio-natural systems.

Management: Head of the social science simulation research group, developing and maintaining software framework, collaborating with project partners, supervising researchers and PhD students.

2012 – 2018 PhD Researcher, University of Southampton, UK

PhD in Complex Systems Simulation in Archaeology (Complex Systems Simulation Doctoral Training Centre)

Thesis: Simulating Hominin Dispersals Using Agent-based Modelling.

COMPUTING SKILLS

Software development:

Python***, R**, C*, Java*

Simulation and GIS:

NetLogo***, PowerSim**,

Repast*, QGIS***,

ArcGIS***

Data analysis:

Pandas***, Matplotlib***,

Seaborn ***, R**

PREVIOUS AND CURRENT PROJECTS

2020–2023 Individual fellowship at Aarhus Institute of Advanced Studies with a project **Reconstructing ancient demographics through archaeological-historical data integration and computer simulation: the cases of the Dutch Roman Limes and Roman Palmyra.**

2019–2022 Group leader on the H2020 funded **IoTwins: Distributed Digital Twins for industrial SMEs: a big-data platform** project. H2020: 857191.

2018–2019 Group leader on the PRACE funded project: **Polyhedra: HPC optimisation of SDLPS distributed simulator.** SHAPE funding, PRACE.

2016–2019 Group leader on the ERC funded **EPNet project. Production and Distribution of Food during the Roman Empire: Economic and Political Dynamics (ERC-2013-ADG-340828)**

Since 2016 **Software Sustainability Institute Fellow** 2016–2017 bit.ly/1NsMpYB

Since 2015 **Leader of the SIG in Complex Systems Simulation (CAA)** bit.ly/1W3LOTW

Since 2014 **Founder and author at the Simulating Complexity Blog** with Stefani Crabtree and Ben Davies. <http://simulatingcomplexity.wordpress.com>

TEACHING

2017, 2019 MSc level module “Agent-based Modelling for Archaeologists” (with Karsten Lambers and Fulco Scherjon). Online module (SPOC – Small Private Online Course), University of Leiden, the Netherlands.

Over 30 Workshops, Sessions and Invited talks on Agent-based Modelling, Simulation, Digital Humanities and Data Analysis at various conferences, summer schools and academic institutions.