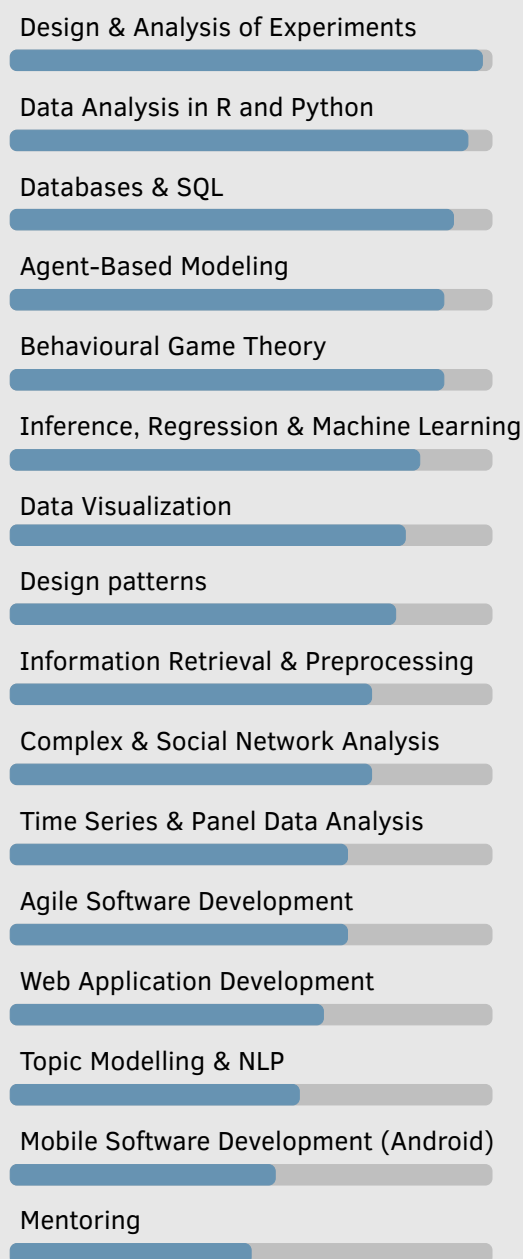


Felipe Maciel Cardoso




Data Scientist | Quantitative Researcher

 December 19, 1988
 Zaragoza, Spain
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 fmacielfcardoso@gmail.com

Skills



Languages

 Portuguese ●●●●●
 English ●●●●●
 Spanish ●●●●●

Education

2017 – 2020 **PhD in Physics** University of Zaragoza
Thesis: *Strategic and Selfless interactions: A study of human behaviour*
2014 – 2016 **MSc in Computer Science** University of Campinas
Thesis: *Topical Homophily in an Online Social Network*
2008 – 2012 **Bachelor of Computer Science** University of Campinas

Working Experience

Research & Data Science

2017 – 2021 **Research assistant** University of Zaragoza & UC3M
Analysed data from experiments and social networks using econometric models and machine learning algorithms (R and Python). Developed platforms for socio-economic experiments using Django/Python and PostgreSQL databases. Developed a novel theoretical model explaining the origins of cooperation. Coded simulations in C++.

Software Development

2013 – 2014 **Software Engineer** Kaffa Mobile
Developed mobile and web applications for GIS using Java, Lua, SQL Server, HSQLDB, and H2. Performed requirements analysis directly with stakeholders.
2012 – 2013 **Software Developer** MC1
Developed applications for Android and Windows mobile devices. Ported Windows Mobile (C#) code to Android (Java). Managed SQL Server and SQLite databases. Mentored interns.
2011 – 2012 **Software Engineer** Kaffa Mobile
Developed mobile applications using Java, Lua, SQL Server, HSQLDB, and H2.
2011 – 2011 **Web Developer** CPqD
Developed an interactive map for the GIGA Project using Java and JavaScript.
2009 – 2011 **Web Developer** Institute of Economics - UNICAMP
Developed management systems using Java, JavaScript, JSF, and SQL Server.
2008 – 2008 **Web Developer** Celere IT
Developed web applications with C#.NET, ASP.NET, and SQL Server.
2007 – 2007 **Software Developer** John & Mark IT Solutions
Participated in the development of an ERP software using Visual Basic.NET and SQL Server.

Exchanges

2019 **Institute for Scientific Interchange** Turin, Italy
One month exchange at the ISI Foundation.
2018 **Institute for Scientific Interchange** Turin, Italy
One month exchange at the ISI Foundation
2015 – 2016 **University of Zaragoza** Zaragoza, Spain
Six months exchange at the COSNET Lab.

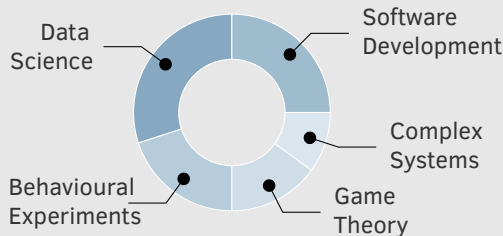
Grants & Awards

2015 – 2016 **Open Data Scholarship** Microsoft Research
17 Months Master Scholarship
2015 – 2016 **International Mobility Scholarship** Santander
Mobility scholarship for 6 months exchange at University of Zaragoza
2014 – 2016 **Master Scholarship** CAPES
3 Months Scholarship

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Expertise



Programming Languages

Python R C++ Java Lua C
C# JavaScript

Databases

PostgreSQL MySQL SQL Server
HSQLDB SQLite

Development Methodologies

Scrum Kanban

Libraries & Tools

caret lme4 plm ggplot2
tidyverse igraph Shiny knitr
NumPy Cython SciPy Keras
Scikit-learn Pandas graph-tool
NLTK Gensim Git Callgrind
Django

Referee Experience

PLoS ONE Physical Review E
Chaos, Solutions & Fractals JSTAT
Journal of Complex Networks

2011

1st Place on the Evaluation Competition
Undergraduate Level

IHC+CLIH 2011

Publications

2020

Dynamics of heuristics selection for cooperative behaviour
F. Maciel Cardoso, C. Gracia-Lázaro, and Y. Moreno
New Journal of Physics

2020

Behavioural patterns behind the demise of the commons across different cultures
M. Jusup, F. Maciel-Cardoso, C. Gracia-Lázaro, C. Liu, Z. Wang, and Y. Moreno
Royal Society Open Science

2020

Effect of network topology and node centrality on trading
F. Maciel Cardoso, C. Gracia-Lázaro, F. Moisan, S. Goyal, A. Sánchez, and Y. Moreno
Scientific Reports

2020

Understanding drivers when investing for impact: an experimental study
L. De Amicis, S. Binenti, F. Maciel Cardoso, C. Gracia-Lázaro, A. Sánchez, and Y. Moreno
Palgrave Communications

2020

Time evolution of the behaviour of Brazilian legislative Representatives using a complex network approach
L. Marengo, H.A. Carmona, F. Maciel Cardoso, J.S. Andrade Jr, and C.L. Cesar
PLoS ONE

2019

Topical Alignment in Online Social Systems
F. Maciel Cardoso, S. Meloni, A. Santanche, and Y. Moreno
Frontiers in Physics

Talks

2020

6th Annual Workshop on Complex Sociotechnical Systems
COMSOTEC20, Burgos, Spain
The selection of heuristics and the evolution of cooperation

2019

Early Career Researchers in Experimental Economics Workshop
ECREEW, Santiago de Compostela, Spain
Indirect donations promote contributions to public goods

2019

Conference on Complex Systems
CCS19, NTU University, Singapore
Trading in Complex Networks

2019

BIFI IX National Conference 2019
BIFI 19, Zaragoza, Spain
Trading in Networks - Topology and Prices

2018

Conference of Complex Systems
CCS18, Thessaloniki, Greece
Universal behavioural patterns behind the demise of the commons

2018

4th Annual Workshop on Complex Sociotechnical Systems
COMSOTEC18, Zaragoza, Spain
Trading in Networks: Efficiency and Topology

Academic Activities

2015

Teaching Assistant - IC/UNICAMP
Algorithms and Computer Programming
Laboratory classes, marking, assignment review, office hours, online support.

2018

BIFI18 Zaragoza, Spain
BIFI International Conference on Complexity, Networks and Collective Behavior
Web design, implementation and local organization.