

# Felipe Maciel Cardoso | CV

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🌐 [fmcardoso.github.io/](https://fmcardoso.github.io/)

## Education

**University of Zaragoza** **Zaragoza, Spain**  
*PhD Candidate in Physics* 2017 - 2020 (expected)

**Advisors:** Prof. Yamir Moreno & Dr. Carlos Gracia Lázaro

**Thesis:** Strategic and Selfless interactions: A study of human behaviour

**University of Campinas** **Campinas, Brazil**  
*MSc in Computer Science* 2014 - 2016

**Advisor:** Prof. André Santanchè

**Thesis:** Topical Homophily in an Online Social Network

**University of Campinas** **Campinas, Brazil**  
*Bachelor of Computer Science* 2008 - 2012

## Exchanges

**ISI Foundation** **Turin, Italy**  
*Institute for Scientific Interchange* 06/2019 – 07/2019

**ISI Foundation** **Turin, Italy**  
*Institute for Scientific Interchange* 06/2018 – 07/2018

**University of Zaragoza** **Zaragoza, Spain**  
*Six months exchange at the COSNET Lab.* 09/2015–02/2016

## Publications

2020 M. Jusup, **F. Maciel-Cardoso**, C. Gracia-Lázaro, C. Liu, Z. Wang, and Y. Moreno, "Behavioural patterns behind the demise of the commons across different cultures", *Royal Society Open Science*, DOI: [doi.org/10.1098/rsos.201026](https://doi.org/10.1098/rsos.201026)

2020 **F. Maciel Cardoso**, C. Gracia-Lázaro, F. Moisan, S. Goyal, A. Sánchez, and Y. Moreno, "Effect of network topology and node centrality on trading", *Scientific Reports*, DOI:[doi.org/10.1038/s41598-020-68094-z](https://doi.org/10.1038/s41598-020-68094-z)

2020 L. De Amicis, S. Binenti, **F. Maciel Cardoso**, C. Gracia-Lázaro, A. Sánchez, and Y. Moreno, "Understanding drivers when investing for impact: an experimental study", *Palgrave Communications*, DOI: [doi.org/10.1057/s41599-020-0447-y](https://doi.org/10.1057/s41599-020-0447-y)

2020 L. Marengo, H.A. Carmona, **F. Maciel Cardoso**, J.S. Andrade Jr, and C.L. Cesar, "Time evolution of the behaviour of Brazilian legislative Representatives using a complex network approach", *PLoS ONE*, DOI: [doi.org/10.1371/journal.pone.0226504](https://doi.org/10.1371/journal.pone.0226504)

2019 F. Maciel Cardoso, S. Meloni, A. Santanche, and Y. Moreno, "Topical Alignment in Online Social Systems", *Frontiers in Physics*, DOI: doi.org/10.3389/fphy.2019.00058

## Papers under review & in preparation

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- **F. Maciel Cardoso**, C. Gracia-Lázaro, and Y. Moreno, "Dynamics of heuristics selection for cooperative behaviour", *under review*.
- **F. Maciel Cardoso**, S. Meloni, C. Gracia-Lázaro, A. Antonioni, José A. Cuesta, A. Sánchez, and Y. Moreno, "Framing in multiple public goods games and donation to charities", *under review*.
- H. Ferraz de Arruda, **F. Maciel Cardoso**, G. Ferraz de Arruda, A.R. Hernández, L. da F. Costa, and Y. Moreno, "How social network algorithms can influence opinion polarization", *in preparation*.
- **F. Maciel Cardoso**, M. Jusup, C. Gracia-Lázaro, Z. Wang, A. Sánchez, and Y. Moreno, "Targets and biases: a collective-risk social dilemma between two countries", *in preparation*.

## Talks

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| <b>COMSOTEC20</b><br><i>6th Annual Workshop on Complex Sociotechnical Systems</i><br>The selection of heuristics and the evolution of cooperation | <b>Burgos, Spain</b><br>2020                 |
| <b>ECREEW</b><br><i>Early Career Researchers in Experimental Economics Workshop</i><br>Indirect donations promote contributions to public goods   | <b>Santiago de Compostela, Spain</b><br>2019 |
| <b>CCS19</b><br><i>Conference on Complex Systems</i><br>Trading in Complex Networks   | <b>NTU University, Singapore</b><br>2019     |
| <b>BIFI 19</b><br><i>BIFI IX National Conference 2019</i><br>Trading in Networks - Topology and Prices  | <b>Zaragoza, Spain</b><br>2019               |
| <b>CCS18</b><br><i>Conference of Complex Systems</i><br>Universal behavioural patterns behind the demise of the commons                           | <b>Thessaloniki, Greece</b><br>2018          |
| <b>COMSOTEC18</b><br><i>4th Annual Workshop on Complex Sociotechnical Systems</i><br>Trading in Networks: Efficiency and Topology                 | <b>Zaragoza, España</b><br>2018              |

## Poster

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| <b>COSTNET ECT</b><br><i>COSTNET: Early Career Training Event</i><br>Trading in Complex Networks  | <b>Munich, Germany</b><br>2019 |
| <b>BIFI18</b><br><i>BIFI International Conference on Complexity, Networks and Collective Behavior</i><br>Topical homophily in online social systems | <b>Zaragoza, Spain</b><br>2018 |
| <b>COSTNET17</b><br><i>Statistical Network Science</i><br>Topical homophily in online social systems  | <b>Mallorca, Spain</b><br>2017 |

## Schools Attended

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**SEMSTAT17** **Eindhoven, Netherlands**  
*Statistical Network Science* 2017

**NetSci-X 2015** **Rio de Janeiro, Brazil**  
*1st International School and Conference on Network Science* 2015

## Employment

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**University of Zaragoza** **Zaragoza, Spain**  
*Research assistant* 02/2019 -  
Development of platforms for socio-economic experiments. Execution and data analysis of experiments.  
Theoretical modelling in evolutionary game theory.

**UC3M** **Madrid, Spain**  
*Research assistant* 02/2017 - 01/2019  
Development of platforms for socio-economic experiments. Execution and data analysis of experiments.

**Kaffa Mobile** **Campinas, Brazil**  
*Software Engineer* 10/2013 - 07/2014  
Development of mobile and web applications with Java and Lua for GIS. Requirements analysis directly with stakeholders.

**MC1** **Campinas, Brazil**  
*Developer* 07/2012 - 10/2013  
Development of applications for Android and Windows mobile devices. Training of interns.

**Kaffa Mobile** **Campinas, Brazil**  
*Intern* 5/2011 - 06/2012  
Development of applications with Java and Lua for mobile devices.

**CPqD** **Campinas, Brazil**  
*Intern* 1/2011 - 05/2011  
Web Development with Java and Javascript.

**Institute Of Economics - UNICAMP** **Campinas, Brazil**  
*Intern* 7/2009 - 1/2011  
Development of Web Applications using Java, Javascript, JSF, and SQL Server Database.

**Celere IT** **Campinas, Brazil**  
*Intern* 4/2008 - 11/2008  
Development of Web Applications with C#.NET, ASP.NET, and SQL Server Database.

**John & Mark IT Solutions** **São José dos Campos, Brazil**  
*Intern* 1/2007 - 12/2007  
Software Development with Visual Basic.NET and SQL Server.

## Academic Activities

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**Teaching Assistant** **University of Campinas**  
*Algorithms and Computer Programming* 2015  
Laboratory classes, marking, assignment review, office hours, online support.

**Invited Lecture** **University of Campinas**  
*Database course* 2015  
Two Lectures about Complex Networks given to undergraduate and graduate students.

## XI Theses and Dissertations Workshop - WTD

Examination Board Member

Evaluation of theses and dissertations proposals.

IC - University of Campinas

2016

## Grants & awards

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### CAPES

Master Scholarship

07/2016

### Microsoft Research - Open Data Scholarship

Master Scholarship

03/2016 - 06/2016

### Santander International Mobility Scholarship

Mobility scholarship for 6 months exchange at University of Zaragoza

07/2015 - 02/2016

### CAPES

Master Scholarship

12/2014-02/2015

### IHC+CLIHC 2011

1st Place on the Evaluation Competition, Undergraduate Level.

2011

## Expertise

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**Data Analysis:** Full-Stack Big Data Analysis, Time Series Analysis, Panel Data Analysis, Dynamic Panel Models, Data Visualization, Machine Learning Algorithms

**Programing Languages:** Python, R, C++, Java, Lua, C, Javascript, C#

**Databases:** PostgreSQL, MySQL, SQL Server, HSQLDB, SQLite

## Referee experience

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- o PLoS ONE
- o Physical Review E
- o Chaos, Solutions & Fractals
- o Journal of Statistical Mechanics: Theory and Methods
- o Journal of Complex Networks

## Conference Organization

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### BIFI18

BIFI International Conference on Complexity, Networks and Collective Behavior

Web design, implementation and local organization

Zaragoza, Spain

2018

## Languages

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Portuguese: Native

English: Fluent

Spanish: Fluent