

Javier Garcia-Bernardo

☎ +31 6 418 408 87 • ✉ garcia@uva.nl • 🌐 javiergb.com

Education

The University of Amsterdam

Ph.D. in Political Science

PostDoc in Social Complexity (starting 2021)

The Netherlands

2015–2020

Santa Fe Institute

Complex System Summer School

United States

2018

The University of Vermont

M.Sc. in Computer Science, GPA – 4.0/4.0

Certificate in Complex Systems, GPA – 4.0/4.0

United States

2013–2015

The University of Leon

B.Ss. in Biotechnology, GPA – 8.9/10

Spain

2007–2012

Languages: Spanish (Mother tongue), English (Fluent), Dutch (Intermediate).

Interests: Computational Social Science; Inequality; Machine Learning; Data Science; Network Science; Taxation; Computational Biology; Political Economy; Social Media; Statistics

Work and Research Experience

2019–present: Tax Justice Network. Data Scientist

I conduct academic research to measure the magnitude and effect of corporate tax avoidance. I develop and test IT systems, create data visualizations, and communicate our findings to a wide audience.

2019–present: Natixio. Co-founder and data scientist (projects detailed below under Consultancy Work)

2015–2020: Ph.D. Candidate. University of Amsterdam, The Netherlands. *Advisor: Dr. Eelke Heemskerk*

Multinationals strategically use highly complex corporate structures of parents and subsidiaries to organize their global operations and minimize tax payments. I used network science and machine learning tools to uncover how multinationals structure to minimize their global tax payments, and the inequalities created by this process.

2012–2015: Graduate Research Assistant. The University of Vermont, USA

○ M.Sc. in Computer Science (2013-2015) and FARO Global scholarship (2012). *Advisor: Dr. Mary Dunlop*

Developing stochastic models of genetic networks to study the role of noise in gene expression.

○ Certificate in Complex Systems (2013-2015). *Advisors: Drs. Peter Dodds, Neil Johnson and Maggie Eppstein*

Computational social science projects, using web scrapping, high performance computing, social network analysis and generative models to understand the dynamics underlying human conflict.

2009-2012: Undergraduate Research

Scholarships in four top Spanish and US laboratories to study the role of several oncogenes in cancer.

Consultancy Work

Feb 2020–Dec 2020: The International Centre for Tax and Development (ICTD) at the University of Sussex

Analyze the consequences of corporate tax avoidance for developing countries.

Aug 2020–Oct 2020: SEO Amsterdam Economics

Estimate the size of the illegal trust sector using financial metadata.

Nov 2019–Apr 2020: OECD. Economics Department

Quantify the effects of common ownership in the productivity of corporations using network models.

Jul 2019–Sep 2020: Tax Justice Network

Support in the development of a web portal

March–May 2019: OECD. Economics Department

Assess data quality and devise robustness tests for a project involving large datasets from different sources

Teaching Experience

2020: Co-supervision of Ph.D student O. Barron (Sheffield Methods Institute) during his internship at the Tax Justice Network. In progress.

2019: Workshop on data visualization. slides.com/jgarciab/wwcs2020_dataviz/

2019: Co-supervision of Political Science M.Sc. student D.S. Hansen. Thesis title: "Investigating the effect of firm financialization on effective tax rates"

2017, 2018, 2019: Workshop on automated web scraping. github.com/jgarciab/web_scraping

2019: Graduate course: Working with Data. github.com/jgarciab/wwd2019

2018: Co-supervision of Computer Science M.Sc. student J.P. Uylings. Thesis title: "Opinion Dynamics on Corporate Boards"

2018: Graduate course: Working with Data. github.com/jgarciab/wwd2018

2017: Graduate course: Working with Data. github.com/jgarciab/wwd2017

2016: Flying circus workshop: Automated text analysis. github.com/jgarciab/text_analysis_python

List of Journal Publications

▪ A. Alorić, **J. Garcia-Bernardo**, P. Krafft, A. Morgan, Z. Neu, A. Santoro "Collective information processing in human rumor spreading networks: An experimental study of rumor content fusion and propagation". In preparation.

▪ **J. Garcia-Bernardo**, J. Janský, "Estimating Profit Shifting using Country by Country Reporting: Taxing Multinational Corporations in Low- and Middle-Income Countries". In submission.

▪ L. Millán-Narotzky, **J. Garcia-Bernardo**, M. Diakité, M. Meinzer "Double Tax Treaty Aggressiveness: Who is bringing down taxing rights in Africa?". Under review.

▪ **J. Garcia-Bernardo**, J. Janský, T. Tørsløv. "Effective tax rates of multinational corporations in Europe". Under review.

▪ **J. Garcia-Bernardo**, J. Janský, T. Tørsløv. "Effective Tax Rates and Corporate Profits in Tax Havens: Evidence from Country by Country Reporting". ITAX, 2020.

▪ **J. Garcia-Bernardo**, S. Stausholm. "Re-Mapping the Geography of Tax Avoidance: Tax Professionals As the Nexus between Onshore and Offshore". Under review (first R&R).

▪ L. Ajdacic, E. M. Heemskerk, **J. Garcia-Bernardo**. "The Wealth Defence Industry: A large-scale study on accountancy firms as profit shifting facilitators". *New Political Economy*, 2020.

▪ A. Reurink, **J. Garcia-Bernardo**. "Competing for capitals: The great fragmentation of the firm, FDI attraction profiles, and the race for foreign investment". *RIPE*, 2020.

▪ **J. Garcia-Bernardo**, J. Janský, T. Tørsløv. "Decomposing the Declining Effective Tax Rates of Multinational Corporations". Under review.

▪ M. Babic, **J. Garcia-Bernardo**, E. Heemskerk. "The Rise of Transnational State Capital: State Ownership, Strategy and Power in the Global Economy". *RIPE*, 2019

▪ **J. Garcia-Bernardo**, E. M. Heemskerk, N. Pisani. "Does it pay off to be a multinational?". *Strategic Management Journal* 2019

▪ E. M. Heemskerk, K. Young, F. W. Takes, B. Cronin, **J. Garcia-Bernardo**, et al. "The Promise and Perils of Using Big Data in the Study of Corporate Networks: Problems, Diagnostics and Fixes". *Global Networks*, 2018

▪ **J. Garcia-Bernardo**, J. Fichtner, F. W. Takes, E. M. Heemskerk. "Uncovering Offshore Financial Centers: Conduits and Sinks in the Global Corporate Ownership Network". *Scientific Reports*, 2017.

▪ **J. Garcia-Bernardo**, F. W. Takes. "The Effects of Data Quality on the Analysis of Corporate Board Interlock Networks". *Information systems*, 2017

▪ J. Fichtner, E. M. Heemskerk, **J. Garcia-Bernardo**. "Hidden Power of the Big Three? Passive Index Funds, Re-Concentration of Corporate Ownership, and New Financial Risk". *Business and Politics*, 2017

▪ E. M. Heemskerk, F. W. Takes, **J. Garcia-Bernardo**, M. J. Huijzer "Where is the global corporate elite? A

large-scale network study of local and nonlocal interlocking directorates". *Sociologica*, 2016

- **J. Garcia-Bernardo**, P. S. Dodds, N. F. Johnson, et al.. "Social media affects the timing, location, and severity of school shootings." *In submission*.
- **J. Garcia-Bernardo**, M. J. Dunlop. "Phenotypic diversity using bimodal and unimodal expression of stress response proteins in fluctuating environments". *Biophysical Journal*, 2016
- **J. Garcia-Bernardo**, P. S. Dodds, N. F. Johnson. "Quantitative patterns in drone wars." *Physica A*, 2016.
- **J. Garcia-Bernardo**, M. J. Dunlop. "Extrinsic Noise and Low-Level Dynamics Coordinate Multicomponent Bet Hedging Mechanisms." *Biophysical Journal*, 2015.
- **J. Garcia-Bernardo**, M. J. Eppstein. "Evolving Modular Genetic Regulatory Networks with a Recursive, Top-Down Approach." *Syst. Synth. Biol*, 2015.
- **J. Garcia-Bernardo**, M. J. Dunlop. "Tunable Stochastic Pulsing in the *Escherichia coli* Multiple Antibiotic Resistance Network from Interlinked Positive and Negative Feedback Loops." *PLOS Comp. Biology*, 2013.

Selected Awards and Scholarships

2020: Inclusion in the *TaxCOOP 35 Leaders of the Future* excellence list.

2019: First prize of *LUCA challenge for responsible use of AI*.

2018: David P. Baron Award for the best article published in the *Business and Politics* journal.

2015: Computer Science Graduate Award for Outstanding Performance and Greatest Promise of Success.

2012: FARO Global Scholarship from Spain's Ministry of Education.

2012: Honorable Mention for Academic Performance at the University of Leon and Star Award for Academic Achievement at the University of Vermont.

2010: Spanish National Research Council Scholarship.

Events (co)Organized

2018 – present: Co-founder of Computational Social Science Amsterdam

2018 – present: Member of the steering committee of the Winter Workshop on Complex Systems

2021: 1st online Winter Workshop on Complex Systems

2020: Development of a the Social Data Science bachelor degree at the University of Amsterdam

2019: International Conference in Computational Social Science (IC2S2), including a pre-conference symposium for young scholars and a datathon on political polarization

2018: 4th Winter Workshop on Complex Systems

2017: Movie screening and panel discussion: *The Spider's Web*

2016: Panel discussion: The role of the Netherlands in offshore finance

Computer skills

Advanced: (C)Python, UNIX, Network analysis, Machine Learning, Evolutionary Algorithms, Data visualization, LaTeX.

Intermediate: HTML, SQL, MATLAB, R, Stata

Basic: JAVA, Javascript, C, Neo4J, MongoDB.

Workshops, Presentations and Posters

Workshops:

○ 2021: Vulnerability and Exposure to Illicit Financial Flows in Nigeria, Nigerian tax administration

○ 2017, 2018, 2019, 2020, 2021: Winter Workshop on Complex Systems

○ 2018: Complexity Science for National Security, Santa Fe Institute

○ 2018: A New Map of Offshore Foreign Direct Investment: From Data to Impact, University of Sussex

○ 2017: Illicit financial flows and underground economy, KU Leuven

Invited talks:

- 2019: Dag van the Financial (The Royal Netherlands Institute of Chartered Accountants)
- 2018: Staat van Nederland (Journalist Expertise Center)
- 2018: Belastingdienst (The Tax and Customs Administration) bestuursdag.
- 2017: OffshoreAlert conference.

Other talks:

- 2020: Invited discussant at the World Tax Summit (TaxCOOP)
- 2020: Invited lecture in Politics, Psychology, Law and Economics (PPLE) bachelor
- 2019: IC2S2 Conference, the Netherlands
- 2019: Tax justice network conference: Professional enablers of tax abuse and crime, the United Kingdom
- 2019: CUSO.ch: Workshop on Power, Switzerland
- 2019: Amsterdam Data Science meetup, the Netherlands
- 2019: Simulation-based-Science at the Institute of Advance Study, the Netherlands
- 2018: International Studies Associations Conference, the Netherlands
- 2017: European Conference on Social Networks, Germany
- 2017: International Conference on Computational Social Science, Germany
- 2017: Tax justice network conference: Global tax justice at a crossroads, the United Kingdom
- 2017: Society for the Advancement of Socio-Economics, France
- 2017: Think Tank on Financial Complexity, the Netherlands
- 2016: Conference on Complex Systems, the Netherlands
- 2016: Sunbelt Social Networks Conference, the United States
- 2014: UVM Student Research Conference, the United States
- 2013, 2014: UVM Computer Science Research Day, the United States

Posters:

- 2019: IC2S2 Conference, the Netherlands
- 2017: ICT.OPEN, the Netherlands
- 2014: Synthetic Biology: Engineering, Evolution & Design (SEED) conference, the United States
- 2014: The Genetic and Evolutionary Computation Conference (GECCO), the United States
- 2013, 2014: UVM Computer Science Fair, the United States
- 2013: Macmillan Symposium, the United States

Other programs:

- 2019: Roche continents, *Austria*
- 2013: Integration through food, *Poland*. Employability and leadership, *Portugal*.
- 2012: Self-development, *Hungary*. The role of sport for people with disabilities, *Turkey*.