# Federico Tiberti

### **Profile**

I am a Data Scientist at the World Bank's Department for Outcomes. I hold a PhD in Politics from Princeton University, with specializations in comparative development and quantitative methods. I have experience conducting high-impact data-intensive research, applied policy analysis, and teaching statistics and data science. I have conducted data-driven research and taught advanced data techniques at the World Bank, the Inter-American Development Bank, and Princeton University. I have advanced knowledge of many programming tools, including R, Python, Stata, Shiny, GIS, and SQL, which I have taught at undergraduate and graduate levels and employed in academic and policy research and in many high-impact public interest projects.

#### Education

Princeton University May 2023

Ph.D. in Politics. Fields: Comparative Politics, Quantitative Methods, Latin American Politics

Princeton, NJ

Princeton University

May 2018
Princeton, NJ

Universidad de San Andres

2013

BA in Political Science. Top 1% GPA

Buenos Aires, Argentina

### Experience

M.A. in Politics

# Professional Experience (select)

- World Bank Group. Data Scientist at the Department for Outcomes, Office of the Senior Management Director. I analyze corporate and operational data to estimate World Bank Group's performance and delivery on a set of outcome indicators. Analysis include advanced interactive visualizations/dashboards, predictive modeling, machine learning and natural language processing of project documents. (2024-).
- World Bank Group. Short-term consultant for the Education Global Practice for Western and Central Africa. I did research, extensive data analysis and supported the elaboration of multiple products for specific projects, including online dashboards and the design of a data curation and publication protocol. Conducted research for several technical reports and led the research and writing of two research papers. (2023-2024).
- Inter-American Development Bank. Consultant at the Housing and Urban Development Division. I was in charge of conducting the research, data collection and analysis for a research project analyzing how infrastructure interventions had the potential to moderate the impact of the COVID-19 pandemic in informal urban settlements in Latin America, which led to an IDB Working Paper. (2022-2023).
- Princeton University Viz Hub. Data science Fellow. Worked alongside with researchers, faculty and students to improve data analysis and visualization projects. I led several workshops in which I taught specific programming tools and statistical concepts, including web dashboards with Shiny, geographic analysis with QGIS and advanced data analysis in R and Python, among others. (2020-2022).
- President's Office, Office of the Chief of Staff, Argentina. I conducted policy analysis and wrote reports for internal circulation. I was in charge of gathering data from multiple government agencies and drafting reports for higher authorities on different topics (2015-2016).
- Government of the City of Buenos Aires. Policy Research. I collected data and conducted analysis for policy projects related to environmental interventions (2013-2014).
- National Congress, Argentina. Aide to Diputada Laura Alonso. Did research to inform legislative bills (2012-2013).

# Academic Experience (select)

- World Politics Journal. Editorial Assistant. Suggested reviewers and tracked peer review for manuscripts submitted to the journal, ranked #2 in political science journals in 2019 by Journal Impact Factor (Journal Citation Reports). (2018-2021).
- Research Assistant to Prof. L. Wantchekon for a project on institutions and educational outcomes in Africa. (2018-19).

# Research and Publications

#### **Publications**

• Book (with Pablo E. Balan) La República Pendiente. Argentina y el problema del desarrollo político. Buenos Aires: Editorial El Ateneo. December 2014.

# Research in Progress (select)

- (with Martin De Simone): Using Large Language Models to Improve Learning Outcomes: Experimental Evidence from Nigeria. World Bank
- (with Martin De Simone): Improving Learning Outcomes with Educational Technology Interventions: Evidence from Nigeria. World Bank
- (with Guillermo Cruces): Infrastructure Improvement and the Impact of COVID-19 in Informal Settlements in Latin America: The Case of Buenos Aires. IADB Working Paper
- The Development of a National Bureaucracy and Legislative Behavior in Argentina, 1906-1930
- (with Hillel D. Soifer): Education Investments and State Development in Chile.
- (with Bryan Schonfeld): Anger, Anxiety and Autarky: The Psychological Determinants of Trade Preferences
- (with Maria P. Saffon and Carlos Freytes): The Legacies of Land Inequality on Development: Evidence from Argentina
- (with Giuliana Pardelli): Railroads and the Territorial Expansion of the State in Argentina

# Teaching (select)

# **Princeton University**

2016-2021

- POL 346: Applied Statistical Analysis. Intermediate and advanced topics in quantitative and computational methodology. Intermediate-advanced programming in R. Course evaluations average: 4.6/5
- POL 351: The Politics of Economic Development. Theory and practice of development policies, focus on the cases of South Korea, China, Nigeria and Brazil. Course evaluations average: 4.75/5
- POL 345: Quantitative Social Science. Basic and intermediate topics in statistical and causal inference. Basic and intermediate programming in R and L<sup>A</sup>T<sub>E</sub>X. Course evaluations average: 5/5.

# Public Interest Projects (select)

### Social Stats | Python, SQL

2023

• Jointly with Leopoldo Tornarolli (UNLP) and Mauro Infantino, developed an interactive website to explore and create customized visualizations with socioeconomic data from multiple sources, including household surveys and periodical government publications, on topics like poverty, earnings, consumption and others.

#### Argentina Election Polls Aggregator | R, html, Shiny

2023

• Programmed an automatic web scraper to aggregate electoral polls for the 2023 election cycle and deployed an interactive web dashboard to access them. Media coverage: Bloomberg, La Nación, El Cronista, El Economista.

# Argentina Covid Data Project | R, Python, SQL

2020-2021

• Created a repository of Covid microdata from Argentina and developed an algorithm to daily estimate non-reported backlog delays in official updates. Media coverage: The New York Times, Bloomberg, La Nacion, Infobae, Clarin, La Tercera (and others).

# Cuantas Vacunas Bot $\mid R, Python, Google Cloud Console$

2021

• Developed a bot that automatically posts updates on the covid-19 vaccination campaign in Argentina using R and Python, running on Google Cloud. Media coverage: El Mundo, La Nacion, Infobae, Clarin.

# Honors, Grants and Awards (select)

- George A. Kateb Teaching Award. Best Preceptor in Politics. Princeton University. 2019
- Charles and Margaret Fayerweather Honorary Fellowship in Politics. Princeton University. 2016-17
- Best Essay National Political Science Academy. Argentina. 2014 (\$5,000)
- Grants: Princeton PLAS (\$5,000). Princeton Bobst Center (\$5,000). Princeton Niehaus Center (\$1,200)

# Skills

Computing: R, Python, LATEX, SQL, Google Cloud, ArcGIS, QGIS, Git, Shiny, Stata, Qualtrics Languages: Spanish (native), English (full proficiency), French (intermediate), Italian (intermediate)