Tiago Sousa Prado

PROFILE

- Researcher, with a Master of Public Policy, an MBA focused on project management, a B. Eng. in Communications Networks, currently pursuing PhD studies in digital platforms policy and economic issues
- Consultant in digital connectivity policy, with an extensive track record of work with governmental actors in LATAM, international organizations (e.g., UN's ITU, OAS/CITEL, and Mercosur), and development banks
- Data scientist with proven work in building and estimating analytical models for classification, optimization, forecasting, causal inference, and other complex problem-solving tasks

EDUCATION

Doctor of Philosophy, Michigan State University, East Lansing – USA

Spring 2023

- Program: Information and Media
- Concentration: Digital Platforms Policy and Economics
- Advanced cross-section and panel data econometrics training with Dr. Jeffrey Wooldridge

Master of Public Policy and Development, Institute for Applied Economic Research, Brasília – Brazil

Feb 2018

- Research topic: design of data-driven analytical models to support broadband policies
- Thesis: Public Policies for High-Speed Broadband Internet Access Expansion: An Econometric Analysis of Alternatives for Brazil

Master of Business Administration, Fundação Getúlio Vargas – FGV, Rio de Janeiro – Brazil

Jun 2016

- Concentration: Project Management
- Final Project: The Relevance of Communication in Public Infrastructure Projects

Certificate Program, University of California, Irvine – USA

April 2016

- Major: Project Management
- 175 hours of evaluated training

Bachelor of Engineering, Universidade de Brasília – UnB, Brasília – Brazil

Jan 2010

- Major: Communications Networks
- Final Project: 3G traffic optimization

WORK EXPERIENCE

Consultant – Digital Markets and Connectivity, Inter-American Development Bank – USA Jun 2021 - Present

- Developed a portfolio of loan operations focused on supporting LATAM governmental agencies to develop connectivity projects aimed at bridging connectivity gaps and boosting digital transformation of the society
- Supported the execution of an USD 31MM project to modernize and expand the capacity of the 8000 km long fiber belt of the State of Ceará, in Brazil, which backhauls internet traffic of more than 100 small operators
- Designed an USD 15MM project to provide optic fiber connectivity, and modern in-building digital infrastructure to 300+ public schools that serve low-income students of the State of Alagoas, in Brazil

Research Assistant, Quello Center for Media & Information Policy – East Lansing, USA Aug 201

Aug 2019 - Present

- Designed and estimated Poisson and two-way fixed effects, differences-in-differences analytical models to assess causal impacts of digital platforms on innovation, using a raw dataset of 50,000+ venture capital deals
- Performed a predictive analysis of broadband service provision in 5,000+ cities in Brazil, using machine learning classification algorithms (logistic regression and random forest) and a panel dataset of socioeconomic indicators

Expert on ICT Infrastructure - Instructor, United Nations and European Commission Oct 2018 - Present

- Authored the ICT Infrastructure Business Planning Toolkit, published by the United Nations in 2019 as a reference on how to use data analytics to enhance policymaking and regulation of telecommunications services
- Trained policymakers and regulators in Europe, Africa, and Latin America on how to use data analytics as a tool to support evidence-based policy and regulatory decisions

Digital Policy and Regulatory Specialist, National Telecommunications Agency – Brazil Jul 2011 – Present

- Led a team of 20 employees responsible for the development of analytical models to assess economic viability of telecommunications projects (4G, 5G, fiber, and satellite broadband, spectrum auction, etc.)
- Spoke on behalf of Brazil and led Brazilian delegations in several conferences related to telecommunications at the Organization of American States (OAS) and at the UN's International Telecommunications Union -ITU
- Coordinated a working group at the ITU with 50+ governmental stakeholders from Africa, Asia and Latin America that harmonized national regulatory frameworks on the quality of broadband services

ICT Advisor on International Banking Platforms, Banco do Brasil S.A - Brazil

Jul 2007 - Jun 2011

- Supported international banking platforms for various offices around the world, mainly in the United States, Europe, Latin America, and Japan
- Implemented the modernization of network and storage systems in accordance with banking regulations of each country

PUBLICATIONS

Academic Journals:

- **Prado, T. S.** (2022). Big Tech Platform Acquisitions of Start-ups and Venture Capital Funding for Innovation (forthcoming). Journal of Information Economics and Policy. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3787127
- **Prado, T. S.**, & Bauer, J. M. (2021). *Improving broadband policy design using market data: A general framework and an application to Brazil*. Telecommunications Policy, 45(4), 102111. https://doi.org/10.1016/j.telpol.2021.102111
- Charlita de Freitas, L., Prado, T. S., L. de Souza Filho, A., Euler de Moraes, L., N. de Moura Filho, R., Stanzani, J., Cavazzoni Lima, R., Alarcón López, L. G., & Baigorri, C. M. (2020). Foundations for the Design of Mechanisms to Fostering Liquidity in the Secondary Spectrum Market in Brazil. Law, State and Telecommunications Review, 12(1), 187-204. https://doi.org/10.26512/lstr.v12i1.30005
- Charlita de Freitas, L., Prado, T. S., L. de Souza Filho, A., N. de Moura Filho, R., Baigorri, C. M., & Euler de Moraes, L. (2020). Economy of infrastructure sharing in the telecommunications sector in Brazil: inventory and the design of a general sharing mechanism. Revista Latinoamericana de Economía y Sociedad Digital, Issue 1 – TICs en Tiempos de COVID-19, 72-91.

Conference Papers:

- **Prado, T. S.**, & Bauer, J. M. (2022). Safeguarding Competition in Digital Markets: A Comparative Analysis of Emerging Policy and Regulatory Regimes (forthcoming). Conference of the International Telecommunications Society 2022. Gothenburg, Sweden.
- **Prado, T. S.** (2021). *Kill Zones? Measuring the Impact of Big Tech Start-up Acquisitions on Venture Capital Activity*. Conference of the International Telecommunications Society 2021. Gothenburg Sweden. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3787127
- Prado, T. S. (2021). Assessing the market power of digital platforms. Presented at the Telecommunications Policy Research Conference – TPRC 48. Washington, DC – USA. http://dx.doi.org/10.2139/ssrn.3747793
- Bauer, J.M. and **Prado, T. S.** (2020). *Lessons from innovation economics for digital platform policy*. Paper presented at the ITS 2020 Conference, and at the TPRC 48. https://dx.doi.org/10.2139/ssrn.3749670

Thesis:

 Prado, T. S. (2018). Public Policies for High-Speed Broadband Internet Access Expansion: An Econometric Analysis of Alternatives for Brazil. Instituto de Pesquisa Econômica Aplicada.
http://www.mestradoprofissional.gov.br/sites/images/mestrado/turma2/tiago_sousa_prado.pdf

Training Material Authored

 ICT Infrastructure Business Planning Toolkit. International Telecommunications Union. 2019. https://www.Itu.Int/Pub/D-PREF-EF.ICT_STRUCT_KIT-2019

International Standards Edited

- ITU-T Recommendation E.805: Strategies to Establish Quality Regulatory Frameworks. International Telecommunications Union. 2019. https://www.Itu.Int/Rec/T-REC-E.805-201912-I
- ITU-T Recommendation E.811: Quality Measurement in Major Events. 2017. https://www.Itu.Int/Rec/T-REC-E.811/En

• ITU-T Recommendation Y.3035: Service Universalization in Future Networks. International Telecommunications Union. 2015. https://www.Itu.Int/Rec/T-REC-Y.3035/En

Other Publications

- **Prado, T. S.** (2021). Regulação de plataformas digitais: por quê e para quem? Teletime, Artigo do Leitor. Available at: https://teletime.com.br/02/02/2021/regulacao-de-plataformas-digitais-por-que-e-para-quem/
- Prado, T. S. (2020). Desafios à competição na Internet: uma nova fronteira regulatória. Teletime, Artigo do Leitor. Available at: https://teletime.com.br/27/07/2020/desafios-a-competicao-na-internet-uma-nova-fronteira-regulatoria/

JOURNAL PEER-REVIEW SERVICE

• Applied Economics Letters

INTERNATIONAL RESEARCH CONFERENCES

- Telecommunications Policy Research Conference (TPRC49) Washington, DC September, 2021
- International Telecommunications Society (ITS) Conference Gothenburg, Sweden June, 2021
- Telecommunications Policy Research Conference (TPRC48) Washington, DC February, 2021
- Telecommunications Policy Seminar Brasília, Brazil February, 2021
- ITU Policy and Economic Colloquium 2020 Geneva, Switzerland October, 2020
- International Telecommunications Society (ITS) Conference Gothenburg, Sweden June, 2020
- Telecommunications Policy Research Conference (TPRC46) Washington, DC September, 2018

GRANTS

- Facebook's Research Grant Measuring Economic Impact in the Digital Economy, awarded in 2020 for the project Modeling and measuring the economic impacts of digital platform innovation. Total amount: \$ 100,000
- Tinker Field Research fellowship awarded by the MSU Center for Latin American and Caribbean Studies (CLACS) 2020. Total amount: \$ 2,000
- Summer Research Fellowship awarded by the MSU Department of Media and Information 2020 and 2021. Total amount: \$ 7,500

AWARDS AND HONORS

- Winner of the Facebook's Measuring Economic Impact in the Digital Economy Research Award 2020
- Winner of the Thomas A. Muth Sr. Endowed Fund in Telecommunication, Information Studies and Media Award – 2020 and 2021
- Elected in the ITU World Telecommunications Standardization Assembly 2016 to represent Latin American countries as vice-chairman of the ITU-T Study Group 12 Performance, QoS and QoE
- Winner of full fellowship for being positioned among the top 2% in the selection process of his Master's Program, which counted with more than 500 officials from many parts of the Brazilian Federal Government
- Positioned in the top 1% among the four thousand engineers who applied for the Anatel's national selection
- Selected in the national exam to the highly competitive engineering program at the University of Brasília

SKILLS

- Leadership, problem-solving, communication, public speaking, negotiation, collaboration, emotional intelligence, self-motivation, project management,
- Languages: English (proficient), Portuguese (native), and Spanish (working experience)
- Data Science: cross-section and panel data analysis, regression modeling, machine learning algorithms, big data, survey designs, structural equation models, A/B testing, SQL, R, MATLAB, STATA, and MS Excel

RELEVANT TRAINING COURSES

- ICPSR Summer Program in Quantitative Methods, University of Michigan Ann Arbor, USA Aug 2020
- Digital Markets and New Regulatory Challenges, Florence School of Regulation and EU University
- Masterclass of EU Electronic Communications Regulation, CULLEN International Belgium. Mar 2021

Jun 2020

• Improving ICT Policy Planning Skills Utilizing Standards, JICA - Tokyo, Japan Jan 2015

INTERNATIONAL COLLABORATION

Between 2012 and 2019, I spoke on behalf of Brazil, and led Brazilian delegations at several digital connectivity-related conferences on the Organization of American States' (OAS), as well as on the United Nations' International Telecommunications Union – UN/ITU. Some of them are listed below.

UN's ITU World Conference on International Telecommunication (WCIT) -

• 2012 - Dubai, United Arab Emirates

UN's ITU World Telecommunications Standardization Assembly (WTSA)

- 2012 Dubai, United Arab Emirates
- 2016 Hammamet, Tunisia

OAS/CITEL Permanent Consultative Committee I (PCC.1)

- 2012/2 San Salvador, El Salvador
- 2013/1 Buenos Aires, Argentina
- 2014/1 Lima, Peru

UN's ITU-T Study Group 12 - "Performance, QoS and QoE"

- 2017 Johannesburg, South Africa
- 2018 New Delhi, India
- 2019 Geneva, Switzerland

UN's ITU-T Study Group 13 - "Future Networks"

- 2014 Geneva, Switzerland
- 2015 Geneva, Switzerland