CURRICULUM VITÆ

January 29, 2025

Name: Carlos Brunet Martins-Filho

Personal: Born in Fortaleza, Brazil. Citizenship: Brazil and USA.

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Degrees:

Ph.D., Economics, University of Tennessee, USA, 1992.
M.A., Economics, University of Tennessee, USA, 1991.
B.S., Economics, Universidade Federal do Ceará, Brazil, 1988.

Research interests: Econometrics, Statistics.

Current positions:

- August, 2009 present: Professor, Department of Economics, University of Colorado, Boulder, USA.
- April, 2017 present: Professor (affiliate), Department of Applied Mathematics, University of Colorado, Boulder, USA.

Past positions:

- December, 2008 August, 2019: Senior Research Fellow, International Food Policy Research Institute, Washington D.C., USA.
- July, 1999 August, 2000: Associate Professor, Graduate School of Economics (EPGE), Fundação Getulio Vargas, Rio de Janeiro, Brazil.
- September, 1992 August, 2009: Assistant, Associate and Full Professor, Department of Economics, Oregon State University, Corvallis, USA.

Visiting positions and other affiliations:

- January, 2023 June, 2023: Visiting Professor, Mathematics of Decision Making and Statistics Group, Toulouse School of Economics, Université Toulouse - Capitole, Toulouse, France.
- May, 2015 December, 2017: Leading Researcher, Institute of Mathematics and Mathematical Modeling, Almaty, Kazakhstan.
- May, 2013: Visiting Professor, Department of Mechanics and Mathematics, Kazakh National University, Almaty, Kazakhstan.

- March, 2012: Visiting Professor, International School of Economics, Kazakh British Technical University, Almaty, Kazakhstan.
- August, 2008 December, 2008: Visiting Professor, Department of Economics, University of Missouri, Columbia, USA.
- August, 2006 August, 2008: Graduate Faculty (Professor), Department of Statistics and Operations Research, University of North Carolina, Chapel Hill, USA.
- July, 2001 September, 2001: Visiting Professor, CAEN, Universidade Federal do Ceará, Fortaleza, Brazil.
- July, 1998 September, 1998: Visiting Associate Professor, Graduate School of Economics (EPGE), Fundação Getulio Vargas, Rio de Janeiro, Brazil.
- June, 1997 September, 1997: Visiting Professor, CAEN, Universidade Federal do Ceará, Fortaleza, Brazil.
- June, 1995 September, 1995: Visiting Professor, Department of Agricultural Economics, Universidade Federal do Ceará, Fortaleza, Brazil.

Administrative positions:

- July, 2005 August, 2007: Chair, Department of Economics, Oregon State University.
- July, 2003 June, 2005: Director of Graduate Studies, Department of Economics, Oregon State University.

Awards, fellowships, grants and contracts:

- 2018-2021: Estimation of discontinuous densities and distribution functions with applications in Economics, Finance and Insurance (with K. Mynbaev). Ministry of Education and Science Grant, Republic of Kazakhstan (93,000 dollars).
- 2016: Outstanding Doctoral Alumnus Award, Haslam College of Business, University of Tennessee, Knoxville.
- 2015-2017: Prediction of rare events and spatial effects in financial and commodity markets (with K. Mynbaev). Ministry of Education and Science Grant, Republic of Kazakhstan (143,189 dollars).
- 2014: Stanford Calderwood Faculty Teaching Award, Department of Economics, University of Colorado.
- 2013: Coruja APESC Award Associação dos Professores do Ensino Superior do Ceará, Brazil.
- 2010-2013: Insuring against the weather: integrating generic weather index products with group-based savings and loans (with S. Dercon, R. Hill and A. Taffesse). I4 Basis Grant (1,167,000 dollars).
- 2010: I4/UC Seed Grant (with S. Dercon, R. Hill and A. Taffesse) (20,000 dollars).
- 2007 2008: Ministry of Finance, Brazil (44,000 reals).
- 2007 2008: International Food Policy Research Institute (with S. Mishra), Washington, D.C. (15,000 dollars).
- 2004-2005: Foreign Researcher Grant from the Ministry of Education and Science, Spain (31,300 euros).

- 1999-2001: Experimental small sample properties for panel data, random coefficient and heteroscedastic seemingly unrelated regression estimators National Council for Scientific and Technological Development CNPq, Brazil (10,800 dollars).
- 1999: Haralambos Simeonides Award for Best Article, Brazilian Econometric Society.
- 1994-1995: Researcher of the Year, Department of Economics, Oregon State University.
- 1990-1992: Dissertation Fellow National Council for Scientific and Technological Development (CNPq), Brazil.

Refereed articles:

- 1. Financial constraints and firm efficiency: further empirical evidence (with A. Kalatzis and A. Ribeiro, Jr.) Finance Research Letters 72, article 106524, 2025.
- 2. Influence of macroeconomic indicators on real income levels as a component of quality of life (with A. Akylbekov and A. Seitkaziyeva) (in Russian) *Central Asian Economic Review* 3, 68-85.
- 3. Robust estimation of additive boundaries with quantile regression and shape constraints (with Y. Fang, L. Xue and L. Yang) *Journal of Business and Economic Statistics* 40, 615-628, 2022.
- 4. A new estimator of a jump discontinuity in regression (with S. Xie and F. Yao), *Economics Letters* 218, article 110711, 2022.
- 5. Exploring nonlinearities between investment and internal funds: evidence of the U-shaped investment curve (with K. Borri and A. Kalatzis), *Economics Letters* 218, article 110713, 2022.
- 6. Nonparametric estimation of unrestricted distributions and their jumps (with K. Mynbaev and D. Henderson), Canadian Journal of Statistics 50, 638-662, 2022.
- 7. Estimation of a partially linear additive model with generated covariates (with X. Geng and F. Yao), Journal of Statistical Planning and Inference 208, 94-118, 2020.
 - (a) Online supplement to "Estimation of a partially linear additive model with generated covariates" (with X. Geng and F. Yao), Journal of Statistical Planning and Inference, 2020.
- 8. Unified estimation of densities on bounded and unbounded domains (with K. Mynbaev), Annals of the Institute of Statistical Mathematics 71, 853-887, 2019.
- 9. Nonparametric estimation of conditional value-at-risk and expected shortfall based on Extreme Value Theory (with F. Yao and M. Torero), *Econometric Theory* 34, 23-67, 2018.
 - (a) Online supplement to "Nonparametric estimation of conditional value-at-risk and expected short-fall based on Extreme Value Theory" (with F. Yao and M. Torero), *Econometric Theory*, 2018.
- 10. Reducing bias in nonparametric density estimation via bandwidth dependent kernels: L_1 view (with K. Mynbaev), Statistics and Probability Letters 123, 17-22, 2017.
- 11. A class of nonparametric density derivative estimators based on global Lipschitz conditions (with K. Mynbaev and A. Aipenova), Advances in Econometrics 36, 591 615, 2016.
- 12. A comparison of nonparametric efficiency estimators: DEA, FDH, DEAC, FDHC, Order-m and α -quantile (with T. da Silva and E. Ribeiro), *Economics Bulletin* 36, 118-131, 2016.
- 13. An asymptotic characterization of finite order U-statistics with sample size dependent kernels: applications to nonparametric estimators and test statistics (with F. Yao), Communications in Statistics Theory and Methods 44, 3251-3265, 2015.

- 14. Financing in an emerging economy: Does financial development or financial structure matter? (with F. de Castro and A. Kalatzis), *Emerging Markets Review* 23, 96-123, 2015.
- Consistency and asymptotic normality for a nonparametric prediction under measurement errors (with K. Mynbaev), Journal of Multivariate Analysis 139, 166-188, 2015.
- 16. High order conditional quantile estimation based on nonparametric models of regression (with F. Yao and M. Torero), *Econometric Reviews* 34, 906-957, 2015.
- 17. Semiparametric stochastic frontier estimation via profile likelihood (with F. Yao), *Econometric Reviews* 34, 413-451, 2015.
- 18. Local exponential frontier estimation (with H. Torrent and F. Ziegelmann), *Brazilian Review of Econometrics* 33, 171-216, 2013.
- 19. On nonparametric estimation: with a focus on agriculture (with R. Färe, S. Grosskopf and C. Pasurka), Annual Review of Resource Economics 5, 93-110, 2013.
- 20. On asymptotic normality of the local polynomial regression estimator with stochastic bandwidths (with P. Saraiva), Communications in Statistics-Theory and Methods 41, 1052-1068, 2012.
- 21. Kernel based estimation of semiparametric regression in triangular systems (with F. Yao), *Economics Letters* 115, 24-27, 2012.
- 22. On functional form representation of multi-output production technologies (with R. Färe and M. Vardanyan), *Journal of Productivity Analysis* 33, 81-96, 2010.
- 23. Bias reduction in kernel density estimation via Lipschitz conditions (with K. Mynbaev), *Journal of Nonparametric Statistics* 22, 219-235, 2010.
- Nonparametric regression estimation with general parametric error covariance (with F. Yao), Journal
 of Multivariate Analysis 100, 309-333, 2009.
- 25. A smooth nonparametric conditional quantile frontier estimator (with F. Yao), *Journal of Econometrics* 143, 317-333, 2008.
- 26. A class of improved parametrically guided nonparametric regression estimators (with S. Mishra and A. Ullah), *Econometric Reviews* 27, 542-573, 2008.
- 27. Vehicle price and hydrocarbon emissions: evidence from the used vehicle markets (with O. Bin), *Applied Economics Letters* 15, 939-943, 2008.
- 28. Finite sample performance of kernel-based regression methods for nonparametric additive models under common bandwidth selection criterion (with K. Yang), *Journal of Nonparametric Statistics* 19, 23-62, 2007.
- 29. Nonparametric frontier estimation via local linear regression (with F. Yao), *Journal of Econometrics* 141, 283-319, 2007.
- 30. A Note on the use of V and U statistics in nonparametric models of regression (with F. Yao), Annals of the Institute of Statistical Mathematics 58, 389-406, 2006.
- 31. Estimation of value-at-risk and expected shortfall based on nonlinear models of return dynamics and extreme value theory (with F. Yao), *Studies in Nonlinear Dynamics and Econometrics* 10, Article 4, 2006.
- 32. Estimation of hedonic price functions via additive nonparametric regression (with O. Bin), *Empirical Economics* 30, 93-114, 2005.

- 33. Optimal IV estimation of systems with stochastic regressors and VAR disturbances with applications to dynamic systems (with D. Mandy), *Econometric Reviews* 20, 485-505, 2001.
- 34. A model of vertical differentiation, brand loyalty and persuasive advertising (with V. Tremblay), in *Advances in Applied Microeconomics*, Eds. M. Baye and J. Nelson, JAI Press, 221-238, 2001.
- 35. Relative efficiency with equivalence classes of asymptotic covariances (with D. Mandy), *Journal of Econometrics* 88, 79-98, 1999.
- 36. A note on a unified approach to asymptotic equivalence of Aitken and feasible Aitken instrumental variables estimators (with D. Mandy), *International Economic Review* 38, 479, 1997.
- 37. A unified approach to asymptotic equivalence of Aitken and feasible Aitken instrumental variables estimators (with D. Mandy), *International Economic Review* 35, 957-979, 1994.
- 38. Seemingly unrelated regressions under additive heteroscedasticity: theory and share equations applications (with D. Mandy), *Journal of Econometrics* 58, 315-346, 1993.
- 39. Demand and pricing of telecommunications services: evidence and welfare implications (with J. Mayo), *RAND Journal of Economics* 24, 439-454, 1993.

Book chapters:

- 1. Relative prices of food and the volatility of agricultural commodities: Evidence for a panel of developing economies (with M. Torero), in *Food Price Volatility and its Implications for Food Security and Policy*. Eds. M. Kalkuhl, J. von Braun and M. Torero. Springer Verlag, Berlin, Germany, 2016.
- 2. Economic methodology and econometrics, in *Introduction to Economics*. Ed. Nali de Souza. Atlas Publishing, São Paulo, Brazil, 1996.

Book reviews:

 A review of "Estimation and inference in nonparametric frontier models: recent developments and perspectives" by Léopold Simar and Paul W. Wilson. *Journal of Economic Literature* 52, 218-220, 2014.

Working papers:

- 1. Estimation of a jump discontinuity in additive regression models (with S. Xie)
- 2. Efficient estimation of nonparametric seemingly unrelated regression models (with F. Yao)
- 3. Efficient nonparametric estimation of dynamic regression systems (with X. Geng)
- 4. Do intangible capital and financial constraints matter to firms' productivity? A semi-parametric fixed effect analysis (with Antonio C. H. Ribeiro, Jr. and A. Kalatzis)
- 5. Optimal nonparametric estimation of distribution functions, convergence rates for Fourier inversion theorems and applications (with K. Mynbaev).

Articles in conferences:

Optimal nonparametric estimation of distribution functions, convergence rates for Fourier inversion theorems and applications. (Plenary Speaker) 20th School of Time Series and Econometrics, Florianópolis, Brazil, July 2023; (Invited Speaker) Workshop on emerging data science methods for complex data with endogeneity or heterogeneity, University of Miami, Miami, USA, November 2023; International Symposium on Nonparametric Statistics, Braga, Portugal, June 2024; 11th World Congress in Probability and Statistics, Bochum, Germany, August 2024.

- 2. Estimation of a jump discontinuity in additive regression models. Conference of the International Association for Applied Econometrics (IAAE), Xiamen, China, June 2024.
- 3. Estimation of a jump discontinuity in nonparametric regression. (Plenary Speaker) 5th Dongbei Econometrics Workshop (online), Dalian, China, June 2021.
- 4. Robust estimation of additive boundaries with quantile regression and shape constraints. 12th International Conference on Computational and Methodological Statistics, London, UK, December, 2019; (Plenary Speaker) XI North American Productivity Workshop (online), Miami, USA, June 2021.
- Nonparametric kernel estimation of unrestricted distributions. 4th Conference of the International Society for Nonparametric Statistics, Salerno, Italy, June 2018; 3rd International Conference on Econometrics and Statistics, Taichung, Taiwan, June 2019.
- 6. Estimation of a partially linear additive model with generated covariates. 2nd Workshop on Multivariate Data and Software, Limassol, Cyprus, April 2019.
- 7. Unified estimation of densities in bounded and unbounded domains. 61st World Statistics Congress of the International Statistical Institute, Marrakech, Morocco, July 2017; 10th Conference on Computational and Methodological Statistics, London, December 2017.
- 8. Estimation of densities in bounded and unbounded domains: the missing link. 9th World Congress in Probability and Statistics, Toronto, Canada, July 2016.
- 9. Estimation of a partially linear regression in triangular systems. 3rd Conference of the International Society for Nonparametric Statistics, Avignon, France, June 2016; China Meeting of the Econometric Society, Chengdu, China, June 2016 (presented by X. Geng); Asian Meeting of the Econometric Society, Kyoto, Japan, August 2016 (presented by X. Geng); Asian Meeting of the Econometric Society, Hong Kong, June 2017; European Meeting of the Econometric Society, Lisbon, Portugal, August 2017.
- 10. Efficient estimation of partially linear models under nonparametric endogeneity. Conference in Honor of Aman Ullah, University of California, Riverside, USA, March 2015; 3rd Conference of the International Society for Nonparametric Statistics, Avignon, France, June 2016.
- 11. Improving bias in nonparametric density estimation: L_1 view. 60th World Statistics Congress of the International Statistical Institute, Rio de Janeiro, Brazil, July 2015 (presented by K. Mynbaev).
- 12. Consistency and asymptotic normality for kernel based nonparametric prediction under heterogeneous measurement error. 32nd. International Seminar on Stability Problems for Stochastic Models, Trondheim, Norway, June 2014; Latin American Meeting of the Econometric Society, São Paulo, Brazil, November 2014.
- 13. The slippery slope of geographic market definition: moving beyond Aspen. 86th Western Economic Association International Annual Conference, Denver, June 2014.
- Relative prices of food and return volatility of agricultural commodities: evidence from some Latin American economies. 17th Annual Conference on Global Economic Analysis, Dakar, Senegal, June 2014.
- 15. Nonparametric estimation of conditional value-at-risk and expected shortfall based on Extreme Value Theory. Australasian Meeting of the Econometric Society, Sydney, Australia, July 2013; 9th International Symposium on Econometric Theory and Applications (SETA), Seoul, South Korea, July 2013; Asian Meeting of the Econometric Society, Singapore, August 2013.
- Asymptotic distribution of the Carroll-Delaigle-Hall estimator in measurement error models (presented by K. Mynbaev). 8th World Congress in Probability and Statistics. Istanbul, Turkey, July 2012.

- 17. High order conditional quantile estimation based on nonparametric models of regression. 86th Western Economic Association International Annual Conference, San Diego, USA, July 2011; (Plenary Speaker) 14th School of Time Series and Econometrics, Gramado, Brazil, August 2011; 66th European Meeting of the Econometric Society, Malaga, Spain, August 2012; Latin American Meeting of the Econometric Society, Lima, Peru, November 2012.
- Local exponential estimation of nonparametric frontiers. European Workshop on Efficiency and Productivity Analysis. Verona, Italy, June 2011.
- 19. Measuring price volatility. African Growth and Development Consortium. Dakar, Senegal, June 2011.
- 20. Nonparametric frontier modeling: a novel inference approach (presented by H. Torrent). XXXII Meeting of the Brazilian Econometric Society. Salvador, Brazil, December 2010.
- 21. On asymptotic normality of the local polynomial regression estimator with stochastic bandwidths (presented by P. Saraiva). Meeting of the Midwest Econometrics Group, Washington University, Saint Louis, USA, October 2010.
- 22. Nonparametric stochastic frontier estimation via profile likelihood. Fifth Biennial Conference of the Hong Kong Economic Association, Chengdu, China, December 2008; Meeting of the Midwest Econometrics Group, Purdue University, West Lafayette, USA, September 2009; New Zealand Econometrics Study Group, Auckland, New Zealand, February 2010; North American Productivity Workshop, Houston, USA, June 2010; Econometric Society World Congress, Shanghai, China, August 2010.
- 23. Nonparametric regression with a parametric spatial autoregressive error structure (presented by C. Parmeter). Third World Conference of Spatial Econometrics, Barcelona, Spain, July 2009.
- 24. Smooth nonparametric conditional quantile profit function estimator (presented by A. Piskunov). North American Productivity Workshop, New York, USA, June 2008.
- 25. A smoothed conditional quantile frontier estimator. Far Eastern Meeting of the Econometric Society, Beijing, China, July, 2006; Econometrics in Rio Conference, Rio de Janeiro, Brazil, July, 2006; European Workshop on Efficiency and Productivity Analysis, Lille, June, 2007; Meeting of the Midwest Econometrics Group, University of Saint Louis, Saint Louis, October, 2007.
- 26. Nonparametric regression estimation with general parametric error covariance. Meeting of the Midwest Econometrics Group, Southern Illinois University, Carbondale, October, 2005; International Conference of the Forum for Interdisciplinary Mathematics, Lisbon/Tomar, September, 2006; Meeting of the Midwest Econometrics Group, University of Kansas, Lawrence, October, 2008 (presented by F. Yao).
- 27. Distance based approach to a class of improved semi-parametric regression estimators. Conference on Information and Entropy Econometrics in Honor of George Judge, Washington, D.C., September, 2005; European Meeting of the Econometric Society, Vienna, August, 2006.
- 28. Reducing bias in kernel density estimation without higher-order kernel requirement (presented by K. Mynbaev). Function spaces, approximation theory, nonlinear analysis. International Conference and Workshop, Russian Academy of Sciences, Steklov Mathematical Institute, Moscow, May, 2005.
- 29. Finite sample performance of backfitting, marginal integration and two stage estimators under common bandwidth selection criterion (presented by K. Yang). Meeting of the Midwest Econometrics Group, Northwestern University, Evanston, October, 2004; Meeting of the Midwest Econometrics Group, University of Cincinnati, Cincinnati, October, 2006.
- 30. Estimation of value-at-risk and expected shortfall based on nonlinear models of return dynamics and Extreme Value Theory. Latin American Meeting of the Econometric Society, Panama City, August, 2003; Meeting of the Midwest Econometrics Group, University of Missouri, Columbia, October, 2003.

- 31. A Nonparametric model of frontiers. Semiparametrics in Rio Conference, Rio de Janeiro, July, 2004; European Meeting of the Econometric Society, Madrid, Spain, August, 2004.
- 32. Estimation of hedonic price functions via additive nonparametric regression. Meeting of the European Economic Association, Venice, August, 2002.
- 33. Additive nonparametric regression estimation via backfitting and marginal integration: experimental finite sample performance. Meeting of the Midwest Econometrics Group, Federal Reserve Bank of Kansas City, Kansas City, October, 2001.
- 34. Estimation of generalized additive nonparametric models. Invited Seminar at the Meeting of the Brazilian Econometric Society, Campinas, December, 2000.
- Econometrics. Invited Seminar at the National Symposium on Probability and Statistics (SINAPE), Caxambu, July, 2000.
- 36. Asymptotic efficiency for IV estimators. Invited Seminar at the Brazilian School of Time Series, Nova Friburgo, July, 1999.
- 37. Estimation of hedonic price functions via additive nonparametric regression. Econometrics Colloquium, University of Victoria, Victoria, Canada, May, 1999; Meeting of the Brazilian Econometric Society, Belém, December, 1999.
- 38. Relative efficiency in equivalent classes of asymptotic covariances. European Meeting of the Econometric Society, Toulouse, August, 1997. Meeting of the Midwest Econometrics Group (presented by D. Mandy), Michigan State University, East Lansing, October, 1997.
- 39. Optimal IV Estimation of systems with stochastic regressors and VAR disturbances with applications to dynamic systems. Meeting of the Midwest Econometrics Group, University of Wisconsin, Madison, November, 1996.
- 40. Asymptotic efficiency with uncooperative finite sample moments. World Congress of the Econometric Society, Tokyo, August, 1995.
- 41. Statistical foundations of econometrics. Econometrics Seminar, National Council for Scientific and Technological Development, Universidade Federal do Rio Grande do Sul, Porto Alegre, May, 1995.
- 42. Experimental small sample properties for panel data, random coefficient, and heterocedastic seemingly unrelated regression estimators (with David Mandy). North American Winter Meetings of the Econometric Society, Anaheim, January, 1993.
- 43. The economic welfare effects of extended area telephone service. Western Economic Association Annual Meetings, Seattle, July, 1991; Southern Economic Association Annual Meetings, Nashville, November, 1991.
- 44. Seemingly unrelated regressions under additive heteroscedasticity: theory and share equation applications. Meeting of the Brazilian Econometric Society, Brasília, December, 1990.

Invited research seminars:¹

Banco Central do Brasil Brigham Young University Centre de Coopération Internationale en Recherche Agronomique pour le Développement Chinese University of Hong Kong

¹Seminar held in the Department of Economics, unless otherwise specified.

Colorado State University - Statistics

El Colegio de Mexico

Emory University

Fundação Getulio Vargas (EPGE)

George Washington University

Georgetown University - McDonough School of Business

Guangdong University of Foreign Studies

Institut National de Recherche en Sciences et Technologies du Numérique (INRIA) - Université de Lille

International Food Policy Research Institute

Kazakh National University - Mathematics

Nankai University - Finance

Oregon State University - Mathematics

Oregon State University - Statistics

Organization for Economic Cooperation and Development (OECD)

Pontifícia Universidade Católica do Rio de Janeiro (PUC)

Ryerson University

Singapore Management University

Tsinghua University - Center for Statistical Science

Universidad de Alicante

Universidade Federal do Ceará

Universidade Federal de Pernambuco - Statistics

Universidade Federal do Rio de Janeiro - Statistics

Universidade Federal do Rio Grande do Sul

Universidade Federal do Rio Grande do Sul - Statistics

Universidade Federal de Roraima

Universidade Federal de Santa Catarina

Universidade Federal de Santa Catarina - Oceanography

Universität Bonn - ZEF

Université de Cergy-Pontoise - THEMA

University of British Columbia

University of California at Riverside

University of Colorado at Boulder - Applied Mathematics

University of Colorado at Boulder

University of Miami

University of Missouri

University of New South Wales

University of Oregon

University of Rochester

University of Tennessee

University of Victoria

University of Wisconsin at Milwaukee

Virginia Tech University - Agricultural Economics

West Virginia University.

Courses taught:

- University of Colorado at Boulder: Econometrics (B.S., Ph.D.), Mathematics for Economists (Ph.D.), Mathematical Statistics (Ph.D.), Applied Econometrics (B.S.), Financial Econometrics (B.S.).
- Oregon State University: Econometrics (B.S., M.S., Ph.D.), Mathematical Economics (M.S., Ph.D.), Microeconomic Theory (B.S.), Managerial Economics (B.S.), Game Theory (B.S.).

- Fundação Getulio Vargas (EPGE): Econometrics (M.S.), Statistics (M.S.).
- University of Missouri: Microeconomic Theory (B.S.), Time Series (Ph.D.).

Thesis supervision:

B.S.

- 1. Thomas, B., 2010, Hospital mergers and their price effects (*summa cum laude*), Department of Economics, University of Colorado, Boulder, USA. First position after graduation: Ph.D. program in Economics at University of California Santa Barbara.
- 2. Fulton, A., 2011, The effect of estimation methods on weather-indexed insurance contracts (magna cum laude), Department of Economics, University of Colorado, Boulder, USA.
- 3. Brauchler, R., 2011, Multivariate nonparametric estimation of value-at-risk and expected shortfall for nonlinear returns using extreme value theory (*summa cum laude*), Department of Economics, University of Colorado, Boulder, USA.
- 4. Grover, S., 2012, Finite sample performance of semi parametric binary choice estimators (*summa cum laude*), Department of Economics, University of Colorado, Boulder, USA.
- 5. Williams, N., 2012, The development of China's fixed income market and its impact on corporate debt issuance (*summa cum laude*), Department of Economics, University of Colorado, Boulder, USA.
- 6. Anderson, D., 2015, Finite sample performance of a semiparametric estimator for a partially linear models under nonparametric endogeneity (*magna cum laude*), Department of Economics, University of Colorado, Boulder, USA.
- 7. Schaffer, N., 2015, A systematic approach to portfolio creation in restructured electricity markets (magna cum laude), Department of Economics, University of Colorado, Boulder, USA.
- 8. Kent, A., 2015, High frequency price decomposition and trade arrivals (magna cum laude), Department of Economics, University of Colorado, Boulder, USA.
- 9. Janas, P., 2016, Using penalized regression to uncover peer effects in a panel spatial autoregressive model (magna cum laude), Department of Economics, University of Colorado, Boulder, USA. First position after graduation: Ph.D. program in Finance at Northwestern University.
- 10. Pelrine, K., 2018, A note on the unconditional bias of the Nadaraya-Watson regression estimator (*summa cum laude*), Department of Economics, University of Colorado, Boulder, USA. First position after graduation: Ph.D. program in Economics at Yale University.
- 11. Ribeiro, Jr., A. C. H., 2022, A comparison between different jump estimators in regression discontinuity designs, Instituto de Ciências Matemáticas e Computação, Universidade de São Paulo, Brazil. First position after graduation: Ph.D. program in Statistics at Carnegie Mellon University.
- 12. Perez de Solay, J., 2025, in progress, Department of Economics, University of Colorado, Boulder, USA.

M.S.

- Mynbaev, K. 1995, Two essays in microeconomic theory and econometrics, Department of Economics, Oregon State University, USA. Current position: Professor, Department of Management and Mathematical Economics, Satbayev University, Kazakhstan.
- 2. Ferreira, M., 2001, Sistemas de custos aplicados à indústria de telefonia fixa local e de longa distância infra-regional no Brasil, EPGE, Fundação Getulio Vargas, Brazil.

- 3. Da Silva, F., 2001, Estimação de regressões aditivas via backfitting e integração marginal: performance em pequenas amostras, EPGE, Fundação Getulio Vargas, Brazil.
- Piskunov, A., 2008, Nonparametric profit frontier estimation via conditional α-quantile, Department of Economics, Oregon State University, USA. Current Position: Principal Software Engineer, Microsoft, USA.

Ph.D.

- 1. Bin, O., 2000, Estimation of implicit prices in hedonic price models: flexible parametric versus additive nonparametric approach, Department of Economics, Oregon State University, USA. Current Position: Professor, Department of Economics, East Carolina University, USA.
- Yao, F., 2004, Three essays on nonparametric and semiparametric regression models, Department of Economics, Oregon State University, USA. Current position: Professor, Department of Economics, West Virginia University, USA.
- 3. Yang, K., 2005, Finite sample performance of nonparametric regression estimators: the case of additive and parametric covariance models, Department of Economics, Oregon State University, USA. Current Position: Professor, Barney College of Business, University of Hartford, USA.
- 4. Vardanyan, M., 2005, Essays on the use of distance functions in empirical studies: efficiency measurement and beyond, Department of Economics, Oregon State University, USA (co-chair with R. Färe). Current Position: Professor of Economics, IESEG School of Management, France.
- 5. Silva, T. L. da, 2006, Nonparametric estimation of efficiency for Brazilian commercial banks, Department of Economics, Universidade Federal do Rio Grande do Sul (UFRGS), Porto Alegre, Brazil (co-chair with E. Pontual Ribeiro). Current Position: Economist, Ministry of Planning and Budget, Government of Brazil, Brasília, Brazil.
- 6. Livingston, O., 2009, Essays in semiparametric econometrics, Department of Economics, Oregon State University, USA. Current Position: Senior Economist, Department of Homeland Security, USA.
- 7. Torrent, H., 2010, Nonparametric and semiparametric estimation of production frontiers, Department of Economics, Universidade Federal do Rio Grande do Sul (UFRGS), Brazil (co-chair with F. Ziegelmann). Current Position: Associate Professor of Statistics, Universidade Federal do Rio Grande do Sul, Brazil.
- 8. Silva, F. B. S. da, ABD, Department of Statistics, University of North Carolina, Chapel Hill, USA (co-chair with P. K. Sen). Current Position: Assistant Professor of Statistics, Universidade Federal do Rio Grande do Sul, Brazil.
- 9. Aipenova, A., 2014, Nonparametric estimation of derivatives of densities using Besov norms, Department of Mathematics, Kazakh National University, Almaty, Kazakhstan (co-chair with K. Mynbaev). Current Position: Assistant Professor, Suleyman Demirel University, Kazakhstan.
- Geng, X., 2015, Essays on the estimation of partially linear models of regression under endogeneity, Department of Economics, University of Colorado, Boulder. Current Position: Research Statistician, Econometric Modeling Group, SAS Institute, USA.
- 11. Lee, N. K., 2015, Essays on nonparametric estimation in Besov spaces, Department of Economics, University of Colorado, Boulder, USA. Current Position: Assistant Professor, Seoul Women's University, Korea.
- 12. Zhou, S., 2016, Estimation of a nonparametric model for a profit frontier and a semiparametric spatial model with fixed effects, Department of Economics, University of Colorado, Boulder, USA. Current Position: Assistant Professor, WYSE Xiamen University, China.

- 13. Penner, E., 2017, An essay in semiparametric structural estimation, Department of Economics, University of Colorado, Boulder, USA. First Position: Post-Doctoral Scholar at The University of California Berkeley, USA.
- 14. Resende, M. C. de, 2018, Análises econométricas sobre a permanência dos alunos do ensino médio da rede pública catarinense, Department of Economics, Universidade Federal de Santa Catarina, Florianópolis, Brazil (co-chair with F. Petterini).
- 15. Xie, S., 2019, Essays on the estimation of a regression jump: a generalized reflection approach. Department of Economics, University of Colorado, Boulder, USA. Current Position: Assistant Teaching Professor, Seattle University, USA.
- 16. Darkenbayeva, G., 2019, Asymptotic theory of regressions with asymptotically collinear regressors, Institute of Mathematics and Mathematical Modeling, Kazakh National University, Almaty, Kazakhstan (co-chair with K. Mynbaev). Current position: Assistant Professor, International University of Information Technology, Almaty, Kazakhstan.
- 17. Fernandez, J. C., 2020, Speculative bubbles in asset prices, Department of Economics, University of Colorado, Boulder, USA (co-chair with M. Boileau). Current position: Global Quantitative Analyst, AMG National Trust Bank, USA.
- 18. Borri, K., 2022, R&D investment, innovative efficiency and financial constraints: empirical analysis using a structural equation model and mixed-effects zero-inflated-Poisson model, Department of Production Engineering, University of São Paulo, Brazil, (co-chair A. Kalatzis). Current position: Assistant Professor, ESALQ Universidade de São Paulo, Brazil.
- 19. Brown, C., 2024, Estimation and inference with Deep Neural Networks under dependent data, Department of Economics, University of Colorado, Boulder, USA.

Professional activities:

Reviewer: Mathematical Reviews, 2008 - present.

Editor: The Brazilian Review of Econometrics, 1999-2002.

Referee:

Journals. Annals of Operations Research, Annals of Statistics, Annals of the Institute of Statistical Mathematics, Applied Mathematical Modelling, Bernoulli, Brazilian Journal of Probability and Statistics, Brazilian Review of Econometrics, Canadian Journal of Statistics, Colombian Journal of Statistics, Communications in Mathematical Research, Communications in Statistics - Theory and Methods, Communications in Statistics - Simulation and Computation, Computational Economics, Computational Statistics and Data Analysis, Econometric Reviews, Econometric Society, Econometric Theory, Econometrics and Statistics, Economic Inquiry, Economics Bulletin, Economics Letters, Emerging Markets Review, Empirical Economics, Entropy, Environment and Development Economics, Estudios Economicos, European Journal of Operational Research, Filomat, Information Economics and Policy, Information Sciences, International Journal of Forecasting, International Journal of Production Research, IEEE-Journal of Automatica Sinica, Journal of the American Statistical Association, Journal of Applied Econometrics, Journal of Applied Economics, Journal of Banking and Finance, Journal of Business and Economic Statistics, Journal of Computational and Applied Mathematics, Journal of Econometrics, Journal of Economic Surveys, Journal of Empirical Finance, Journal of Financial Econometrics, Journal of Multivariate Analysis, Journal of Nonparametric Statistics, Journal of Probability and Statistics, Journal of Productivity Analysis, Journal of Risk, Journal of the Royal Statistical Society-Series B, Journal of Statistical Theory and Practice, Marketing Science, Mathematical Reviews,

Methodology and Computing Operations Research, Perspectives in Economic Education Review, Portuguese Statistical Journal, Quantitative Economics, Quarterly Journal of International Agriculture, RAND Journal of Economics, Review of Network Economics, Revista Brasileira de Economia, Scandinavian Journal of Statistics, Statistica Sinica, Statistics, Stochastic Models, Stochastics, Studies in Nonlinear Dynamics and Econometrics, Technometrics.

Publishers. Academic Press, Cambridge University Press, CRC/Chapman-Hall, FGV Editora, John Wiley & Sons, McGraw Hill Publisher, Oxford University Press.

Grants. National Science Foundation, USA; Natural Sciences and Engineering Research Council, Canada; Swiss National Science Foundation, Switzerland.

Scientific committee:

- 1. Latin American Meeting of the Econometric Society, Guayaquil, November, 2018.
- 2. 38th International Symposium on Forecasting (organizing committee), Boulder, June, 2018.
- 3. XXX Brazilian Econometric Society Meetings, Salvador, December, 2008.
- 4. XXVII Brazilian Econometric Society Meetings, Natal, December, 2005.
- 5. Latin American Meeting of the Econometric Society, São Paulo, July, 2002.

Consulting:

DataPrev, 2018; Emerald Power, 2001; ANEEL-National Agency for Electrical Energy: Brazil, 2000; Dreyfus-Brascan Asset Management, 1999-2000; United Nations Consultant to the Central Bank of Brazil, 1999-2000; Delaware Public Service Commission on Behalf of AT&T Communications of Delaware: SGAT Procedure, 1997; Colorado Public Service Commission on behalf of AT&T Communications of the Mountain States, Inc.: On the matter of rate rebalancing and access charges, 1996; Public Service Commission of Utah on behalf of AT&T Communications of the Mountain States, Inc.: On economic guideposts on the implementation of the Telecommunications Act of 1996, 1996; Washington, D.C. Public Service Commission (Docket No. TAC 1) on behalf of AT&T Communications of Washington D.C.: Economic analysis of the Telecommunications Act of 1996, 1996.

Languages: English, French, Portuguese, Spanish.

References: Upon request.