## PERSONAL INFORMATION

**Victor Hugo Lachos Davila, PhD**
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Google Scholar Citation : https://scholar.google.com/citations?user=-aosoKwAAAAJ

## PROFESSIONAL SUMMARY

**Primary Departmental Program Areas**: Statistics

**Areas of expertise and interest**: Linear/nonlinear mixed-effects models, skew-elliptical distributions, time series analysis, measurement error models, semiparametric models, censored regression, spatial models, augmented models, finite mixture of distributions

## EDUCATION

### Graduate

**2009 - 2010** **Postdoctoral Studies**
University of Connecticut, USA
Advisor: Dipak K. Dey

**2002 - 2004** **Ph.D. degree in Statistics**
Department of Statitstics, São Paulo State University, USP, São Paulo, Brazil
Thesis: Assymetrics Linear Mixed Models
Advisor: Heleno Bolfarine and Reinaldo B. Arellano-Valle

**2000 - 2002** **M.Sc. degree in Statistics**
Department of Statistics, Campinas State University, UNICAMP, Campinas, Brazil.
Thesis: Inference and Diagnostics in Measurement Error Models
Advisor: Filidor Vilca Labra

### Undergraduate

**1995 - 1999** **B.Sc. degree in Statistics and Informatics (Honors)**
Department of Statistics, “La Molina” Nacional University Agrarian, UNALM, Perú

## WORK EXPERIENCE

### Academic Appointment History

| | |
|---|---|
| **08/2017–Current** | Professor [Tenured], Department of Statistics, University of Connecticut, Storrs, USA. |
| **08/2016–05/2017** | Visiting professor, Department of Statistics, University of Connecticut, Storrs, USA. |
| **03/2017–08/2017** | Professor [Tenured], Department of Mathematics and Statistics, Campinas State University, UNICAMP, Campinas, Brazil |
| **11/2011–03/2017** | Associate professor [Tenured], Department of Mathematics and Statistics, Campinas State University, UNICAMP, Campinas, Brazil |
| **04/2006–11/2011** | Assistant professor: Department of Mathematics and Statistics Campinas State University, UNICAMP, Campinas, Brazil |

### Other Employment History

| | |
|---|---|
| **05/2011–04/2015** | Director of the Undergraduate Program in Statistics. Campinas State University, UNICAMP, Campinas, Brazil |
| **10/2004 –03/ 2006** | Senior Analyst**:** Dynamic Modeling of Operations and Markets, Bayes Forecast. Sao Paulo Brazil |
| **02/1999 –07/ 1999** | Research Assistance**:** Center of Cancer Research ”Maes Heller”, Lima-Peru**.** |

## AWARDS AND FELLOWSHIP

1. Fellowship: Coordination for the Improvement of Higher Education Personnel - CAPES, M.Sc. studies, 03/2000 -02/2002. Brazil

2. Fellowship: Coordination for the Improvement of Higher Education Personnel - CAPES, Ph.D. studies, 03/2002 -10/2004. Brazil

3. Honorary Mention for the Best Master Thesis, National Symposium in Probability and Statistics - SINAPE, July 2002. Brazil.

4. Received the IASI Award for excellence for the Best Young Research in the area of Statistics in the American Region, National Symposium in Probability and Statistics - SINAPE, July 2008.

5. Received the Distinguished Professor Award “Zeferino Vaz” from Campinas State University - Brazil, December, 2012.

6. Received the CAPES (Coordination for the Improvement of Higher Education Personnel) honorable mention for the Supervision of the Best Doctoral Thesis in the area of Mathematics and Statistics, December 2015, Brazil.

7. Received Honorary Doctor Degree, from *Universidad Pedro Ruiz Gallo*, Lambayeque-Peru, October 2016.

8. Recognition for Teaching Excellence, UConn Provost's Office. Fall 2016, spring 2017 and fall 2019.

**Award with Graduate Students**

1. Denise Reis Costa, Ph.D. received the Best Poster Presentation Award during the II CONBRATRI (*Congresso Brasileiro de Teoria de Resposta ao Item*). Bahia - Brazil, December-2011.

2. Larissa Avila Matos, Ph.D. received an honorary mention for the Best Master Thesis defended in the period 2010-2011. SINAPE AWARD. Joao Pessoa - Brazil, July-2012.

3. Christian Eduardo Galarza Morales, M.Sc. received the Inter American Statistical Institute (IASI) Award for Excellence for the Best Young Research in the area of Statistics in the American Region during the Word Congress of Statistics (ISI-2015). Rio de Janeiro - Brazil, July-2015.

4. Aldo William Medina Garay, Ph.D. received the second prize for the Best Doctoral Thesis during the 60th RBRAS and 16th SEAGRO. Presidente Prundente, Sao Paulo - Brazil, July-2015.

5. Diana Milena Galvis Soto, Ph.D. received an honorary mention for the Best Thesis in the area of Mathematics and Statistics defended in the period 2014-2015. CAPES Thesis Award**.** Brasilia – Brazil, December - 2015**.**

6. Christian Eduardo Galarza Morales, Ph.D. was awarded the first prize for the Best Master Thesis defended in the period 2014-2015. National Symposium of Probability and Statistics - SINAPE AWARD. Porto Alegre- Brazil, July-2016.

7. Diana Milena Galvis Soto, Ph.D. was awarded the first prize for the Best Doctoral Thesis defended in the period 2014-2015. National Symposium of Probability and Statistics - SINAPE AWARD. Porto Alegre - Brazil, July-2016.

8. Christian Eduardo Galarza Morales, Ph.D. received the Jan Tinbergen Award during the Word Congress of Statistics (ISI-2017). Marrakech - Morocco, July-2017.

9. Fernanda Lang Schumacher, Ph.D. was awarded the second prize for the

Best Master Thesis defended in the period 2015-2017. SINAPE AWARD. Aguas de São Pedro - Brazil, July-2018.

10. Christian Eduardo Galarza Morales, Ph.D. received the "Best LACSC -2019 Paper Award" at the 4th Latin American Conference for Statistical Computing. Guayaquil - Ecuador, May-2019.

11. José Alejandro Ordoñez, Ph.D. received the "Best EBEB -2020 Poster Award" in the 15th Brazilian Meeting of Bayesian Statistics. São Paulo, Brazil, March-2020.

12. Fernanda Lang Schumacher, Ph.D. received a Student Competition Award of Statistics in association with the Conference in Honour of Fred Smith and Chris Skinner". Southhampton, UK, June-2021.

13. Katherine Andreina Loor Valeriano, M.Sc. received an honorary mention for the Best Master Thesis defended in the period 2017-2019. Brazilian Statistics Association, Brazil, July-2021.

## MEMBERSHIP IN SCIENTIFIC OR PROFESSIONAL SOCIETIES

1. New England Statistical Society (NESS) [Life Member]
2. Brazilian Statistical Association (ABE) [2002 - Present]
3. American Statistical Association (ASA) [2017-Present]
4. International Chinese Statistical Association (ICSA) [2016-Present]
5. International Statistical Institute (ISI) [2015 - Present]
6. Inter-American Statistical Institute (IASI) [2008 - Present]
7. International Society for Bayesian Analysis (ISBA) [2010-2015]
8. Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) [2017-2018]

## SCIENTIFIC AND SCHOLARLY ACTIVITIES

### EXPERT SERVICE

#### Editorial Board Positions

#### Associate Editor for

- S A N K H Y A Series B (2016 – Present)
- Brazilian Journal of Probability and Statistics (2014 – Present)
- Stats, Open Access Journal of Statistical Sciences (2016 - Present )
- Electronic Journal of Statistics (2021- Present)

**Grant Review**

- Ad hoc Reviewer, Statistical grants for Fondecyt [Fondo Nacional de Desarrollo Científico y Tecnológico] – the principal public funding entity of the Govt. of Chile
- Ad hoc Reviewer, Statistical grants for CNPq [Concelho Nacional de Ciencia e tecnologia] – the principal public funding entity of the Govt. of Brazil.
- Ad hoc Reviewer, Statistical grants for FAPESP [Fundação de Amparo à Pesquisa do Estado de São Paulo] – the principal public funding entity of the Sao Paulo State- Brazil
- Ad hoc Reviewer, Statistical grants for FECEPE [Fundação de Amparo à Pesquisa do Estado de Pernambuco] – the principal public funding entity of the Pernambuco-Brazil
- Ad hoc Reviewer, Statistical grants for PUCP - Peru [Pontificia Universidad Católica del Perú]
- Ad hoc Reviewer, Statistical grants for Swiss National Science Foundation- Swiss [SNSF/ Div. Mathematics, Physical and Engineering Sciences]
- Panelist, Grant Review Panel SNF/DMS.

**Journal Referee**

Journal of the American Statistical Association
Journal of Computational and Graphical Statistics
The American Statistician
Biostatistics
Journal of Agricultural, Biological and Environmental Statistics.
Statistical Modeling.
Bayesian Analysis
Journal of Multivariate Analysis.
Statistics (Berlin).
Communication in Statistics: Simulation and Computation.
Communication in Statistics: Theory and Methods
Communication in Statistics: Case Studies and Data Analysis
Journal of Statistical Computation and Simulation.
Computational Statistics, Computational Statistics & Data Analysis.
Statistics and Probability Letters.
Brazilian Journal of Probability and Statistics.
Statistics and its Interface
Statistics and Computing
Scandinavian Journal of Statistics
Test
Metrika
Journal of Applied Statistics
Statistical Papers
Revista Brasileira de Biometria
Advances in Statistical Analysis.
Advances in Data Analysis and Classification.
Biometrical Journal.
Environmetrics

Applied Stochastic Models in Business and Industry.
The Chilean Journal of Statistics
Neurocomputing
Journal of Statistical Theory and Practice.
REVSTAT
Quantitative Finance
Studies in Nonlinear Dynamics and Econometrics
Iranian Journal of Science and Technology Transactions A: Science
Digital Signal Processing
Statistical Methods & Applications
Journal of Biopharmaceutical Statistics
Soft Computing
Journal of the Royal Statistical Society, Series A.
Journal of the Royal Statistical Society, Series B.
Journal of the Royal Statistical Society, Series C.
Sankhya A and B
Statistics in Medicine
Information Sciences
Environmental and Ecological Statistics
Mathematics and Computers in Simulations
Metron.
Statistical Methods in Medical Research.
Computational Economics
Statistical Analysis and Data Mining
Computational Intelligence
Spatial Statistics
Communications for Statistical Applications and Methods

**Short Academic Visits**

- Department of Statistics, Pontificia Universidade Catolica del Peru, Peru [2007]
- Department of Biostatistics and Winship Cancer Institute, Emory University [2009]
- Department of Statistics, University of Connecticut [2010]
- Department of Statistics, Universidad de Concepcion, Chile [2011,2012,2013,2014]
- School of Public Health, University of Minnesota [2012,2013,2014, 2015]
- Department of Statistics, Pontificia Universidade Catolica de Santiago, Chile [2011, 2017]
- Department of Applied Mathematics, Institute of Statistics. National Chung Hsing University, Taichung, Taiwan [2013, 2017, 2019]
- Department of Statistics, Graduate Institute of Statistics and Actuarial Science, Feng Chia University, Taichung, Taiwan [2013, 2017]
- Department of Statistics, University of Southampton, Southampton, UK [2015]
- Department of Statistics, Universidad del Quindío, Colombia [2017]
- Department of Statistics, Universidad Nacional de Colombia, Colombia [2018]
- Department of Statistics, Universidade Estadual de Campinas, Brazil [2018, 2021]
- Department of Statistics, University of Padua, Italia [2019]
- Department of Statistics, Universidad Nacional de Trujillo, Trujillo Peru [2020]

- Department of Statistics, Universidad Nacional Pedro Ruiz Gallo, Chiclayo, Peru [2019, 2020]

**GRANTS AND CONTRACTS**

1. *Estimação e diagnóstico em modelos de regressão skew-t-normal*. Research Fellowship. FAPESP – Process # 2006/57721-8. Total Award Amount: R$33,000, 07/01/2006 06/30/2008.

2. *Modelos lineares e não lineares com distribuições de mistura da escala skew-normal*. Research Fellowship - Level 2 CNPq – Process # 308109/2008-2. Total Award Amount: R$36,000, 01/03/2009 – 02/28/2012.

3. *Modelos robustos com distribuições de mistura da scala skew-normal*. FAPESP – Process # 2008/11455-0. Total Award Amount: R$30.450,00, 06/01/2009 – 05/31/2011.

4. *Modelos hierárquicos com distribuições de mistura da escala skew-normal*. Research Fellowship . Process # FAPESP 2008/02159. Total Award Amount: R$34289,16, 08/01/2008 –07/31/2010.

5. *Modelos não lineares com distribuições de mistura da escala da skew-normal.* Funding for postdoc studies at Uconn CNPq – Process # 201384/2008-6. Total Award Amount: US$ 32600 (in dollar), 06/01/2009 –05/31/2010.

6. *Modelos lineares e não lineares com distribuições de mistura da scala skew-normal*. Funding for postdoc studies at Uconn. FAPESP – Process # 2010/01246-5. Total Award Amount: US$ 21540 (in dollar), 07/01/2009 –12/31/2010.

7. *Processos espaciais de misturas de escala skew-normal*. Research Fellowship. FAPESP – Process # 2011/01437-8. Total Award Amount: R$ 89,774.2, 06/01/2011 –05/31/2012.

8. *Análise Bayesiana de modelos Tobit usando a distribuição t de Student*. Research Fellowship. FAPESP – Process # 2011/07978-0. Total Award Amount: R$ 7239.96, 06/01/2011 –05/31/2012.

9. *Aplicações das distribuições de misturas da escala skew-normal em modelos de efeitos mistos*. Research Fellowship . FAPESP - Process # 2011/17400-6. Total Award Amount: R$ 33250, 12/01/2011 –11/30/2013.

10. *Aplicações das distribuições de misturas da escala skew-normal em modelos de análise fatorial.* FAPESP – Process # 2011/22063-9. Research Fellowship . Total Award Amount: R$ 157416.5 , 03/05/2012 –03/04/2016.

11. *Aplicações das distribuições de misturas da escala skew-normal em modelos de efeitos mistos*. Research Fellowship – level 1D. CNPq - Process # 305054/2011-2. Total Award Amount: R$ 105600, 03/05/2012 –03/04/2016.

12. *Modelos robustos de efeitos mistos usando distribuições de misturas da escala normal*. Funding for visiting professor Dipak Kumar Dey. FAPESP – Process # 2012/03590-0. Total Award Amount: R$ 9510.05, 07/29/2012 –08/17/2012.

13. *Modelos lineares e não lineares para dados censurados usando distribuições de misturas da escala skew-normal*. Research Fellowship. FAPESP – Process # 2012/18702-9. Total Award Amount: R$ 42051.24, 03/01/2013 –02/28/2015.

14. *Modelagem flexível de modelos longitudinais complexos usando distribuições skew-elípticas*. Funding for visiting professor Luis Mauricio Castro Cepero FAPESP – Process # 2012/19445-0. Total Award Amount: R$ 112420, 09/01/2013 – 08/31/2014.

15. *Modelos com erros nas variáveis para dados censurados usando distribuições de misturas da escala skew-normal*. Research Fellowship. FAPESP – Process # 2013/21468-0. Total Award Amount: R$ 102736.17, 05/01/2014 –10/31/2015.

16. *Regressão e series temporais em modelamento de dados incompletos. Funding for postdoc-Sandwich student*. FAPESP – Process # 2014/13994-7. Total Award Amount: R$ 102736.17, 10/01/2014 –12/31/2014. Total Award Amount: R$ 55172.84, 05/01/2014 –10/31/2015.

17. *Estimação e diagnóstico em modelos de efeitos mistos para dados censurados usando misturas da escala skew-normal*. Research Fellowship. FAPESP - Process # 2014/02938-9. Total Award Amount: R$ 22903.33, 05/01/2014 –06/30/2015.

18. Organization of International Events. XIV Regression School of Regression Model – UNICAMP. CNPq – Process # 466294/2014-0. Total Award Amount: R$ 28500, 03/01/2015 –02/28/2016.

19. *Estimação em Modelos de Efeitos Mistos para Respostas Censuradas usando as Distribuições de Misturas da Escala Normal*. Research Fellowship. FAPESP – Process # 2015/05385-3. Total Award Amount: R$ 46020, 07/15/2015 –01/14/2016.

20. *Estimação Robusta em Modelos Espaciais para Dados Censurados.* Research Fellowship. FAPESP – Process # 2015/17110-9. Total Award Amount: R$ 139860.71, 03/01/2016 –02/28/2019.

21. Organization of International Events. IV Workshop in Survival Analysis and Applications (IV WASA) – UFMG-2015. FAPESP – Process # 2015/18263-3. Total Award Amount: R$ 139860.71, 03/01/2016 –02/28/2019. Total Award Amount: R$ 15476, 11/30/2015 –12/02/2015.

22. *Modelagem Flexível em Regressão para Dados com Censuras*. Funding for visiting professor Celso Romulo Barbosa Cabral. FAPESP – Process # 2015/20922. Total Award Amount: R$ 147236.40, 07/01/2016 –06/30/2017.

23. *Estimacão Robusta em Modelos de Regressão para Dados Censurados*. Research Fellowship - Level 1C: CNPq - Process # 306334/2015. Total Award Amount: R$ 115200, 03/01/2016 –02/28/2020.

24. *Modelos semi-paramétricos de efeitos mistos com respostas múltiplas censuradas sob a classe de distribuições misturas de escala normal*. Funding for visiting professor Victor Hugo Lachos Davila. FAPESP – Process # 2018/05013-7. 06/25/2018 –08/24/2018

25. Star Up. University of Connecticut. August 2017-August 2020. US$ 25000.00.

26. Serves as a Co-PI on a research training grant from The Travelers Companies for "Modeling and Analysis of Large Insurance Claim and Occurrence Data: A Partnership Between UConn and Travelers." $760,000 (2019 - Actual)

## INVITED SPEAKER AND SHORT COURSES

1. Skew-normal/independent regression models: A Bayesian approach. 9o. Encontro Brasileiro de Estatistica Bayesiana EBEB (ISBRA). Maresias-Brazil, Feb-2008. [Invited talk]**.**

2. Scale mixtures of skew-normal distribution with applications in regression models. 18o SINAPE, July 2008, Aguas de São Pedro, São Paulo- Brazil [Invited talk].

3. Approximate inferences for skew-normal independent nonlinear mixed effects models. IV skew workshop. *Pontifícia Universidade Católica de Chile*, Santiago, Chile, 2011 [Invited talk].

4. Linear mixed models and their extensions. *II Encuentro Nacional de Matemáticas e Estadística*, U*niversidad de Ibagué*, Colombia, 2012 [Invited talk]**.**

5. Likelihood-based inference for mixed-effects models with censored response using the multivariate-t Distribution". *Departamento de Estadística, Universidad de Concepción,* Chile, 2012 [Invited colloquium].

6. Multivariate measurement error models using finite mixtures of skew-Student t distributions". *5th International Conference of the ERCIM WG on COMPUTING & STATISTICS (ERCIM 2012),* Oviedo – Spain, 2012 [Invited talk].

7. Bayesian mixture modeling of censored partially linear models. *II Jornada Internacional de Probabilidad e Estadistica (JIPE-II)*, Lima – Peru, 2012 [Invited talk].

8. Likelihood-based Inference for Mixed-Effects Models with Censored Respons Using the Multivariate-t Distribution". 2o Colóquio de Matemática do Sudeste, January 2013, São Carlos, SP, Brazil [Invited talk].

9. Análise de dados censurados sob distribuições simétricas com aplicações no R. 3o Workshop em Análise de Sobrevivência e Aplicações (WASA-2013), November 2013, Campinas State Univeristy, Campinas, SP, Brazil. [Invited short course].

10. Augmented mixed beta regression models for periodontal proportion data. Departamento de Estadística, Universidad de Concepción, Chile, 2013 [Invited colloquium].

11. Bayesian inference in mixed effects models for censored data with applications to HIV studies. Department of Applied Mathematics, Institute of Statistics. National Chung Hsing University, Taichung – Taiwan, 2013 [Invited colloquium].

12. *Modelos Não Lineares Assimétricos"*. XIII Escola de Modelos de Regressão-EMR, de 02/24/2013 a 02/24/2013, São Sebastião, SP, Brazil. [Invited short course]**.**

13. Likelihood-based inference for mixed-effects models with censored response using the multivariate-t distribution. Department of Statistics, Graduate Institute of Statistics and Actuarial Science, Feng Chia University, Taichung – Taiwan, 2013 [Invited talk].

14. "Likelihood-based Inference for mixed-effects models with censored response using the multivariate-t distribution, *Joint Statistical Meeting* (JSM-2013) . Montreal – Canada. 2013 [Invited talk].

15. Censored mixed effects models with censored responses using heavy tails distributions*. 6th International Conference of the ERCIM WG on COMPUTING & STATISTICS (ERCIM-2013),* London – UK, 2013 [Invited talk]

16. Likelihood-based inference for mixed-effects models with censored response using the multivariate-t distribution. *The Ninth ICSA International Conference: Challenges of Statistical Methods for Interdisciplinary Research and Big Data***.** Hong Kong , 2013 [Invited talk].

17. Robust mixture regression modeling based on scale mixtures of skew-normal distributions. *II Workshop on Model-Based Clustering and Classification (MBC2-2014)*. Catania-Italy, 2014 [Invited talk].

18. Likelihood-based Inference for mixed-effects models with censored response using the multivariate-t distribution. XXI Simpósio Nacional de Probabilidade e Estatística (SINAPE), July 2014, Hotel Praiamar, Ponta Negra, Natal-RN, BRAZIL. [Invited talk]**.**

19. Análisis de datos censurados sobre distribuciones simétricas con aplicaciones en R. XI *Congreso Latinoamericano de Sociedades de Estadística* (CLATSE-XI), La Serena – Chile, 2014 [Invited short course]**.**

20. Misturas Finitas de Distribuições Assimétricas. XIV Escola de Modelos de Regressão- EMR**,** Maresias, Sao Paulo-Brazil [Invited short course]**.**

21. Quantile regression for mixed-effects models with censored responses. ICSA/Graybill *Joint Statistical Meeting* (2015). COLORADO-USA 2015 [Invited talk].

22. Bayesian analysis of augmented mixed beta regression models for periodontal proportion data. 60th ISI World Statistics Congress (WSC), Rio de Janeiro-Brazil, 2015. [Invited talk]

23. Likelihood-based inference for mixed-effects models with censored response using the multivariate-t distribution. Department of Statistics, University of Southampton, Southampton - UK, December 2015 [Invited colloquium].

24. Heavy-tails censored regression models: A likelihood based perspective". 8th International Conference of the ERCIM WG on COMPUTING & STATISTICS (ERCIM-2015), London – UK, December 2015 [Invited talk]

25. Análise de dados censurados sob distribuições simétricas com aplicações no R. 2o Encontro Goiano de Probabilidade e Estatística (ENGOPE-2015), November 2015, Universidade Federal de Goiás, Goiânia/GO - Brazil [Invited Short Course].

26. Likelihood-based Inference for Mixed-Effects Models with Censored Response Using the Multivariate-t Distribution. 2o Encontro Goiano de Probabilidade e Estatística (ENGOPE-2015),November 2015, Universidade Federal de Goiás, Goiânia/GO – Brazil [Invited talk – Keynote Speaker]

27. Heavy-tails nonlinear censored regression models: A likelihood based perspective. XXII Simpósio Nacional de Probabilidade e Estatística (SINAPE), July 2016, Porto Alegre, Brazil [Invited talk - Keynote Speaker]

28. Heavy-tails nonlinear censored regression models: A likelihood based perspective. 12th Congresso Latinoamericano de las Sociedades de Estadística (CLATSE-2016), Lambayeque – PERU, Oct 2016 [Invited talk – Keynote Speaker].

29. *Modelos de Regresión Cuantílica: Teoría y Aplicaciones "12th Congresso Latinoamericano de las Sociedades de Estadística (CLATSE-2016)*, Lambayeque – **PERU**, Oct 2016 [Invited Short Course].

30. Heavy-tails nonlinear censored regression models: A likelihood based perspective. Department of Statistics, University of Connecticut – USA, January 2017.

31. Finite mixture modeling of censored data using the multivariate Student-t distribution. Department of Applied Mathematics, Institute of Statistics. National Chung Hsing University, Taichung – Taiwan, Dec 2017 [Invited colloquium].

32. Heavy-tails censored regression models: A likelihood based perspective. Department of Statistics, Graduate Institute of Statistics and Actuarial Science, Feng Chia University, Taichung – Taiwan, Dec 2017 [Invited colloquium].

33. Heavy-tails censored regression models: A likelihood based perspective. *1st International Conference on Econometrics and Statistics (EcoSta 2017)*, Hong Kong, Dec 2017 [Invited talk].

34. Robust Finite Mixture Modeling of Censored Data Using the Multivariate Student-t Distribution. Modern Modeling Methods Conference (MMM 2017). University of Connecticut – USA, May 2017 [Invited talk].

35. A Multivariate Student-t Regression Model with Measurement Errors for Censored Data. 2017 Conference on Lifetime Data Science (LIDA 2017). University of Connecticut – USA, May 2017 [Invited talk].

36. Linear regression models using finite mixtures of skew heavy-tailed Distributions. Flexible Statistical Models For a Skewed World of Data (Skew Workshop 2017). Pontificia Universidad Católica de Chile – Chile, October 2017 [Keynote speaker].

37. Robust Finite Mixture Modeling of Censored Data Using the Multivariate Student-t Distribution. 10th International Conference of the ERCIM WG on COMPUTING & STATISTICS (ERCIM-2017), London – UK, December 2017 [Invited talk].

38. Heavy-tailed longitudinal regression models for censored data: a robust parametric approach. Department of Biostatistics, Virginia Commonwealth University – Virginia-USA, April 2018. [Invited colloquium].

39. Heavy-tailed longitudinal regression models for censored data: a robust parametric approach. Department of Statistics, Universidad Nacional de Colombia – Colombia, May 2018. [Invited colloquium].

40. Heavy-tailed longitudinal regression models for censored data: a robust parametric approach. Modern Modeling Methods Conference (MMM 2018). University of Connecticut – USA , May 2018 [Invited talk].

41. Finite mixture modeling of censored data using the multivariate Student-t distribution. 2st International Conference on Econometrics and Statistics (EcoSta 2018). Hong Kong , June 2018 [Invited talk]..

42. Censored regression models for complex data. *Departamento de Estadística, Universidad Catolica de Santiago,* Chile, August 2018 [Invited colloquium]..

43. Finite Mixture of Skewed Distributions". Second International Conference in Stochastic Processes and Random Phenomena and Their Applications: In Tribute to the 65th birthday of Professor Dipak K. Dey (CIPEFA-2018), Lima – Peru, October 2018 [Invited short course].

44. Mixed effects Model for Complex Data. Department of Statistics, UMASS/UCONN colloquium – USA, October 2018. [Invited colloquium].

45. Heavy-tailed longitudinal regression models for censored data: a robust parametric approach. Department of Statistics, University of Padua, Italy, Dec 2018 [Invited colloquium].

46. Autoregressive skew-normal/independent linear mixed models. 11th International Conference of the ERCIM WG on COMPUTING & STATISTICS (ERCIM-2018), Pisa – Italy, December 2018 [Invited talk].

47. Mixed effects Model for Complex Data. XVI Escola de Modelos de Regressão-EMR**,** Pirenópolis, GO– Brazil, March 2019 [Keynote speaker].

48. Finite mixture modeling of censored data using the multivariate skew-normal distribution. The Third International Conference on Econometrics and Statistics (EcoSta 2019), National Chung Hsing University, Taichung - Taiwan, June 2019. [Invited colloquium].

49. Finite mixture modeling of censored data using the multivariate skew-normal distribution. The 3rd International Conference on Statistical Distributions and Applications (ICOSDA 2019), Grand Rapids, MI - USA, October 2019. [Invited talk].

50. Mixed effects Model for Complex Data. VI Workshop em Analises de Sobrevivência e Aplicações-WASA**,** Piracicaba, SP– Brazil, November 2019 [Keynote speaker].

51. Likelihood-based Inference for Mixed-Effects Models with Censored Response Using Skew-Normal Distribution. 12th International Conference of the ERCIM WG on COMPUTING & STATISTICS (ERCIM-2019), London – UK, December 2019 [invited talk].

52. Likelihood-based Inference for Mixed-Effects Models with Censored Response Using Skew-Normal Distribution", The 11th ICSA International Conference: Innovation with Statistics and Data Science. Hangzhou-China, December 2019 [Invited talk].

53. Mixed Effects Models for Complex Data. *V Jornada Peruana-Internacional de Investigación en Ingeniería*. Trujillo-Peru, January 2020 [Invited talk].

54. Finite mixture modeling of censored data with skew-normal distribution. Department of Statistics, Federal University of Pernambuco**,** Brazil, June 2021 [Keynote speaker]

55. Heavy-tailed longitudinal regression models for censored data: A robust parametric approach. Invited talk at *Coloquio Virtual pre-Congreso Científico Bicentenario por la Independencia del Perú (CCBIPerú2021), Cuzco, Peru, July 2021, Coloquio de Matemáticas*. [Invited talk]

56. Recent advances in asymmetric linear mixed models. Invited talk at The 29th Congreso de Matematica Capricornio (COMCA-2021), Chile, July 2021. [Invited talk]

57. Invited colloquium virtual lecture at the Department of Statistics, *Universidad Nacional de Trujillo*, Peru, October 2021.

58. Invited talk Virtual ISI World Statistics Congress 2021- ISI Mahalanobis International Award - Session in honour of Prof. Heleno Bolfarine, July 2021.

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## TEACHING, ADVISING AND MENTORING

**COURSES TAUGHT** [Responsible for 100% of course]

### Campinas State University (Unicamp) - Brazil

#### Undergraduate courses

1. Probability
2. Basic Statistics
3. Statistics for Experimentalists
4. Quality Control
5. Econometrics
6. Introduction to Probability Models
7. Time Series
8. Generalized Linear Models
9. Inference
10. Computational Methods in Statistics
11. Scientific Methodology

#### Graduate courses

12. Linear Models
13. Generalized Linear Models
14. Advanced Inference
15. Computational Methods in Statistics
16. Asymptotic Theory

### University of Connecticut (UConn)

#### Graduate courses

17. Mathematical Statistics I
18. Mathematical Statistics II
19. Advanced Inference: Inference II

#### Undergraduate courses

20. Introduction to Statistics II
21. Intro to Mathematical Stats I
22. Intro to Mathematical Stats II

## GRADUATE STUDENT SUPERVISION

### Master Student Supervised

1. Alejandro Monzon Montoya**.** Campinas State University (MS thesis, 2009). Zero Inflated Models for Counts Data. CAPES- Brazil.

2. Rodrigo Marreiro Basso**.** Campinas State University (MS thesis, 2009). Finite Mixtures Using Scale Mixtures of Skew-Normal Distributions. CAPES –Brazil.

3. Rignaldo Rodrigues Carvalho. Campinas State University (MS thesis, 2010). Local Influence Analysis of Measurement Error Model with Scale Mixtures of Skew-Normal Distributions. CAPES -Brazil.

4. Aldo W. Medina Garay**.** Campinas State University (MS thesis, 2010). Nonlinear Models with Scale Mixtures of Skew-Normal Distributions. FAPESP – Brazil.

5. Larissa Avila Matos**.** Campinas State University (MS thesis, 2012). Linear Mixed Effects Models for Censored Data with Normal and Student-t Distributions. CAPES - Brazil.

6. Monique Bettio Massuia**.** Campinas State University (MS thesis, 2015). Censored Regression Models. FAPESP - Brazil.

7. Christian Eduardo Galarza Morales**.** Campinas State University (**MS thesis**, 2015). Quantile Regression for Mixed Effects Models. CAPES - Brazil.

8. Edgar Javier Lopez Moreno**.** Campinas State University (MS thesis, 2016). Finite Mixtures of Censored regression models. CAPES – Brazil. (with Celso Cabral)

9. Fernanda Lang Schumacher**.** Campinas State University (MS thesis, 2016). Censored Autoregressive Models. CAPES – Brazil. (with Filidor Vilca)

10. Thalita do Bem Mattos**.** Campinas State University (MS thesis, 2016). C*ensored Regression Models with Scale Mixtures of Skew-Normal Distributions*. CAPES – Brazil.

11. Thais Silva Barbosa**.** Campinas State University (MS thesis, 2016). Spatial Models for Censored Data. CAPES – Brazil.

12. Jose Alejandro Ordoñez**.** Campinas State University (MS thesis, 2017). Spatial models for censored data. CAPES - Brazil. (with Celso Cabral)

13. Marcela Nuñez Lemus**.** Campinas State University. (MS thesis, 2018).

Semiparametric regression models for censored data. CAPES - Brazil. (with Larissa Avila Matos)

14. Rommy Camasca Olivari. Federal University of Pernambuco. (MS thesis, 2019). Autoregressive Linear Mixed Effects Models for Censored Data. CAPES - Brazil. (with Aldo Medina)

15. Katherine Andreina Loor Valeriano. Campinas State University. (MS thesis, 2019). Spatio-Temporal Models for Censored Data. CAPES - Brazil. (with Larissa Avila Matos)

**PhD Student Supervised**

1. Clecio da Silva Ferreira. University of Sao Paulo (PhD, 2008). Inference and diagnostics in asymmetric models (with Heleno Bolfarine). CAPES-Brazil.
   Current Position: Associate professor in the Dept. of Statistics, Universidad Federal de Juiz de Fora, Brazil.

2. Camila Borelli Zeller**.** Campinas State University (PhD, 2009). Influence Diagnostics in Linear Models with Scale Mixtures of Skew-Normal Distribution (with Filidor Vilca Labra). CAPES-Brazil.
   Current Position: Associate professor in the Dept. of Statistics, Universidad Federal de Juiz de Fora, Brazil.

3. Betsabé Grimalda Blas**.** University of Sao Paulo (PhD, 2010). Asymmetrical Measurement Errors Models (with Heleno Bolfarine). CAPES – Brazil.
   Current Position: Associate professor in the Dept. of Statistics, Universidade Federal de Pernambuco, Brazil.

4. Aldo William Medina Garay: Campinas State University (PhD, 2014). Censored Regression Models with Heavy Tails Distributions (with Heleno Bolfarine). CNPq-Brazil.
   Current Position: Assistant professor in the Dept. of Statistics, Universidade Federal de Pernambuco, Brazil.

5. Denise Reis Costa**.** Campinas State University (PhD, 2014). *Estimação Robusta em modelos de Variáveis Latentes para dados Censurados*. CAPES-Brazil.
   Current Position: Postdoctoral Researcher, CEMO, University of Oslo, Norway.

6. Diana Milena Galvis Soto. Campinas State University (PhD, 2015). Zero-One augmented regression Models for Proportional Data. CAPES – Brazil.
   Current Position: Assistant professor in the Dept. of Statistics, Universidad del Quindio, Colombia.

7. Isabel Cristina Gomes. Federal University of Minas Gerais (PhD, 2015). Influence and Diagnostics for Censored Regression Models. (with Lourdes Contreras). CAPES-Brazil.
   Current position: Adjunt Professor, Faculdade de Ciências Médicas de Minas Gerais, Belo Horizonte - Brazil

8. Larissa Avila Matos. Campinas State University (PhD, 2016). Censored Regression Models for Mixed effects models. FAPESP – Brazil.
   Current Position: Assistant professor in the Dept. of Statistics, Universidade Estadual de Campinas, Brazil.

9. José Alejandro Gonzalez Campos. Campinas State University (PhD, 2016). Statistics and Fuzzy set Theory. CAPES- Brazil.
   Current Position: Assistant professor in the Dept. of Statistics, Universidad de Playa Ancha, Valparaiso-Chile.

10. Luis Enrique Benites Sanchez. São Paulo State University (PhD, 2018). Finite Mixtures of Regression Models (with Heleno Bolfarine) CNPq- Brazil.
    Current Position: Assistant professor in the Dept. of Statistics, Pontificia Universidad Católica del Peru, Peru.

11. Christian E. Galarza Morales. Campinas State University. (PhD, 2020). Moments of Multivariate Truncated Distributions (with Larissa Avila Matos) FAPESP- Brazil.
    Current Position: Assistant professor in the Dept. of Statistics, *Escuela Politecnica del Litoral*, Ecuador.

12. Thalita do Bem Matos. Campinas State University. (PhD 2020). Robust Mixed Effect Models (with Larissa Avila Matos). CAPES-Brazil.
    Current Position: Data scientist at C&C Brazil and Adjunct professor at University of Fortaleza (UNIFOR), Fortaleza - Brazil.

13. Tairan Ye. University of Connecticut. (PhD, 2019). On Generalization of Tweedie Distribution: a Bayesian Perspective (with Dipak Dey)
    Current Position: Data scientist at Liberty Mutual Group, Boston.

14. Jose Alejandro Ordoñez. Campinas State University. (PhD 2021). On Default Priors for Regression Models (with Larissa Avila Matos). CAPES-Brazil.
    Current Position: Postdoctoral Researcher, Universidad Federal da Bahia, Brazil.

15. Fernanda Lang Schumacher. Campinas State University. (PhD 2021). Robust linear mixed models for longitudinal data using skewed and heavy-tailed distributions (with Larissa Avila Matos). CNPq-Brazil.
    Current Position: Assistant professor in the Dept. of Biostatistics, Ohio State University, USA.

**Post doctor Supervised**

1. Larisa Avila Matos. Campinas State University. (Post-doc, 2016-2017). Mixed effects models for censored data. FAPESP-Brazil.

2. Marcos Oliveira Prates. Campinas State University (Post-doc, 2011-2012). Skew-normal/independent random fields. FAPESP-Brazil.

3. Aldo William Medina Garay: Campinas State University (Post-doc, 2014-2015). Measurement Error Models for Censored Data. FAPESP – Brazil.

4. Celso Romulo Barbosa Cabral. Campinas State University (Post-doc 2014-2015). Finite Mixture of Skew distributions. CNPq – Brazil.

5. Javier Ferrua Vivanco. Campinas State University (Post-doc, 2013*). Modelos de regressão para dados censurados usando distribuições de misturas da escala skew-normal.* CNPq-Brazil

**Visiting Professors Supervised**

1. Luis Mauricio Castro Cepero from University of Concepcion, Chile (2014-2015). *Modelagem flexível de modelos longitudinais complexos usando distribuições skew-elípticas*. FAPESP-Brazil.

2. Jorge Luis Bazan Guzmán from Pontifical Catholic University of Peru, Peru (2011-2012). Bayesian Analysis for Data in the Unit Interval. CAPES/CNPq – Brazil.

3. Jacek Leskow from Wroclaw University of Technology, Poland (2014). *Métodos computacionais modernos em modelagem estocástica*. FAPESP-Brazil.

4. Celso Romulo Barbosa Cabral from Federal University of Manaus, Brazil (2015-2016). *Modelagem Flexível em Regressão para Dados com Censura*. CNPq – Brazil.

**Ongoing supervision**

1. Francisco Hildemar Calixto de Alencar. Campinas State University. PhD student (2016→present)

2. Kelin Zhong. University of Connecticut. PhD student (2021→present)

3. Dashun Liu. University of Connecticut. PhD student (2021→present).

4. Jiwon Park. University of Connecticut. PhD student (2021→present) (with Dipak Dey)

## UNDERGRADUATE STUDENT SUPERVISION

1. Monique Bettio Massuia**.** Campinas State University (Monography, 2012). *Análise Bayesiana de Modelos Tobit Usando a Distribuição t-Student.* FAPESP- Brazil.

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## PUBLICATIONS

## PAPERS PUBLISHED IN PEER REVIEWED JOURNALS

The underline indicates a student (Master or PhD) co-author

1 Arellano-Valle, R. B., Bolfarine H. and **Lachos, V. H.** (2005). Skew-normal linear mixed models. *Journal of Data Science*, 3, 415-438.

2 Arellano-Valle, R. B., Ozan S., Bolfarine, H. and **Lachos**, **V. H.** (2005). Skew-normal measurement error models. *Journal of Multivariate Analysis*, 96, 265-281.

3 Bolfarine, H. and **Lachos, V. H.** (2006*).* Skew-binary regression with measurement errors. *Statistics (A Journal of Theoretical and Applied Statistics), 40, 485-494.*

4 **Lachos, V. H.,** Vilca-Labra, F.E. and Gálea-Rojas, M. (2007*).* Influence diagnostics for Grubbs's model*. Statistical Papers*, *48, 419-436*.

5 Bolfarine, H. and **Lachos, V.H .** (2007*).* Skew-probit measurement error model. S*tatistical Methodology, 4, 1-12.*

6 **Lachos, V. H**., Bolfarine, H. and Arellano-Valle R. B. and Montenegro, L. C. (2007). Likelihood based inference for multivariate skew-normal regression models. *Communication in Statistics – Theory and Methods*, 36, 1769-1786.

7 Arellano-Valle R. B., Bolfarine H. and **Lachos, V. H.** (2007). Bayesian inference for skew-normal linear mixed models. *Journal of Applied Statistics,* 34, 663-682*.*

8 Bolfarine, H., Montenegro, L. C. and **Lachos, V. H**. (2007). Influence diagnostics for skew-normal linear mixed models. *Sankhya, Series B,* 69, 648-670.

9 **Lachos**, **V. H**. (2008). Scale mixtures of skew-normal distribution with applications in regression models. *Estadistica (Instituto Interamericano de Estadística)*, 60, 42-73.

10 Cancho, V. G., Aoki, R. and **Lachos**, **V. H.** (2008). Bayesian analysis for a skew extension of the multivariate null intercept measurement error model. *Journal of Applied Statistics*, 35, 1239-1251.

11 Ortega, E. M. , Cancho, V. G. and **Lachos, V. H**. (2008). Assessing influence in survival data with a cured fraction and covariates. *Statistics and Operations Research Transactions* (SORT), 32, 115-140.

12 **Lachos, V. H**., Montenegro, L. C. and Bolfarine, H. (2008). Inference and assessment of local influence in skew-normal null intercept measurement error models. *Journal of Statistical Computation and Simulation*, 78, 395-419.

13 Ortega, E. M., Cancho V. G. and **Lachos, V. H**. (2009). Generalized log-gamma mixture model for cure rate: estimation and sensitivity analysis. *Sankhya* (Indian Statistical Institute), Series B, 71, 1-29.

14 **Lachos, V. H**., Cancho, V .G., Vilca-Labra, F. E. and Aoki, R. (2009). Robust multivariate measurement error Model with skew-normal/independent distributions and Bayesian MCMC implementation. *Statistical Methodology*, 6, 527-541.

15 Ghosh, P., Bayes, C. R. and **Lachos, V. H**. (2009). A Robust bayesian approach to null intercept measurement error model with application to dental data. *Computational Statistics and Data Analysis*, 53, 1066-1079.

16 **Lachos, V. H**., Dey, K. D. and Cancho, V. G. (2009). Robust linear mixed models with skew-normal independent distributions from a Bayesian perspective. *Journal of Statistical Planning and Inference*, 139, 4098-4110.

17 Montenegro, L. C., Bolfarine, H. and **Lachos, V. H**. (2009). Influence diagnostics for a skew extension of the Grubb's model. *Communication in Statistics-Simulation and Computation*, 38, 667-681.

18 Montenegro, L. C, **Lachos, V. H**. and Bolfarine H. (2009). Local influence analysis of skew-normal linear mixed models. *Communication in Statistics- Theory and Methods*, 38, 484-496.

19 **Lachos, V.H**., Bolfarine H. and Montenegro, L. C. (2010). Inference for a skew extension of the Grubbs model. *Statistical Papers*, 51, 701-715.

20 Cancho, V. G., **Lachos, V.H**. and Ortega, E. M. (2010). A nonlinear model with skew-normal errors. *Statistical Papers*, 51, 547-558.

21 Cancho, V. G., Ortega, E. M. and **Lachos, V.H.** (2010). Skew-normal comparative calibration models. *Journal of Statistical Theory and Applications*, 9, 143-168.

22 **Lachos, V. H.**, Cancho, V. G. and Aoki, R. (2010). Bayesian analysis for skew-t multivariate null intercept measurement error model. *Statistical Papers,* 51,531-545.

23 Cancho, V. G., Dey, K. D., **Lachos, V. H.** and Andrade, M. (2010). Bayesian nonlinear regression models with scale mixtures of skew normal distributions:

estimation and case influence diagnostics. *Computational Statistics and Data Analysis,* 55, 588-602.

24 Basso, R. M, **Lachos, V. H**, Cabral, C. R. B. and Ghosh, P. (2010) . Robust mixture modeling based on scale mixtures of skew-normal distributions. *Computational Statistics and Data Analysis*, 54, 2926-2941.

25 Zeller, C. B., Vilca-Labra, F. E., **Lachos, V. H.** and Balakrishnan, N.(2010). Influence analyses of skew-normal/independent linear mixed models. *Computational Statistics and Data Analysis*, 54, 1266-1280.

26 Bandyopadhyay, D, **Lachos, V. H.**, Abanto-Valle, C. A. and Ghosh, P. (2010). Linear mixed models for skew-normal/independent bivariate responses with application to periodontal disease. *Statistics in Medicine,* 29, 2643–2655.

27 Abanto-Valle, C. A., Bandyopadhyay, D, **Lachos, V. H.** and Enriquez, I. (2010). Robust bayesian analysis of heavy-tailed stochastic volatility models using scale mixtures of normal distributions. *Computational Statistics and Data Analysis*, 54, 2883-2898.

28 **Lachos, V. H.**, Bolfarine H., Vilca-Labra, F. E. and Ghosh, P. (2010). Robust multivariate measurement error models with scale mixtures of skew-normal distributions. *Statistics (A Journal of Theoretical and Applied Statistics)*, 44, 541-556.

29 **Lachos, V. H.**, Ghosh, P. and Arellano-Valle R. B. (2010). Likelihood based inference for skew-normal/independent linear mixed model. *Statistica Sinica*, 20, 303-322.

30 Vilca-Labra, F. E. Garibay, V.C. and Aoky R. and **Lachos, V. H.** (2011). Skew-normal distribution in multivariate null intercept measurement error model. *Brazilian Journal of Probability and Statistics,* 25, 145-170.

31 Garay, A. M., **Lachos, V. H**, and Abanto-Valle, C.A. (2011). Nonlinear regression models based on scale mixtures of skew-normal distributions. *Journal of the Korean Statistical Society*, 40, 115-124.

32 **Lachos, V. H.**, Angolini, T. and Abanto-Valle, C. A.(2011). On estimation and local influence analysis for measurement errors models under heavy-tailed distributions. *Statistical Papers*, 52, 567–590.

33 Ferreira, C. S., Bolfarine, H. and **Lachos, V. H.** (2011). Skew Scale Mixtures of Normal Distributions: Properties and Estimation. *Statistical Methodology,* 8, 154–171.

34 Abanto-Valle, C. A., Migon, H. and **Lachos, V. H.** (2011). Stochastic volatility in mean models with scale mixtures of normal distributions and correlated errors: A

Bayesian approach. *Journal of Statistical Planning and Inference*, 141, 1875-1887.

35 Zeller, C. B., **Lachos, V. H** and Vilca-Labra, F. E. (2011). Local influence analysis for regression models with skew-normal independent distributions. *Journal of Applied Statistics*, 38, 343 – 368.

36 Garay, A. M., Hashimoto, E., Ortega, E. M., and **Lachos, V. H**. (2011). On estimation and influence diagnostics for zero-inflated negative binomial regression models. *Computational Statistics and Data Analysis*, 55, 1304-1318.

37 **Lachos, V. H.**, Bandyopadhyay D. and Dey D. K. (2011). Linear and non-linear mixed-effects models for censored HIV viral loads using normal /independent distributions. Biometrics, 55, 1304-1318.

38 **Lachos, V. H.,** Bandyopadhyay, D. and Garay, A.M. (2011). Heteroscedastic nonlinear regression models based on scale mixtures of skew normal distributions. *Statistics and Probability Letters*, 81, 1208-1217.

39 Abanto-Valle, C. A**., Lachos, V. H**. and Ghosh, P. (2012). A Bayesian term structure modeling using heavy-tailed distributions. *Applied Stochastic Models in Business and Industry,* 28, 430-447.

40 Prates, M. O., Dey, D. K, and **Lachos, V. H**. (2012). A dengue fever study in the state of Rio de Janeiro with the use of generalized skew-normal/independent spatial fields. *The Chilean Journal of Statistics,* 3, 33-45.

41 Zeller, C. B., Carvalho, R. R, and **Lachos, V. H.** (2012). On diagnostics for multivariate measurement error model with asymmetric heavy-tailed distributions. *Statistical Papers*, 53, 665-683.

42 Abanto-Valle, C. A., Migon, H. S. and **Lachos, V. H.** (2012). Stochastic volatility in mean models with heavy-tailed distributions. *Brazilian Journal of Probability and Statistics*, 26, 402–422.

43 Bandyopadhyay, D., **Lachos, V.H.**, Castro, L.M.C and Dey, D. K. (2012). Skew normal independent linear mixed models for censored responses with applications to HIV viral loads. *Biometrical Journal*, 405-425, 2012.

44 **Lachos, V. H.**, Garay, A. M. , Ortega, E. M. and Vilca, L. F. (2012). Estimation and diagnostics for heteroscedastic nonlinear regression models based on scale mixtures of skew-normal distributions. *Journal of Statistical Planning and Inference*, 142, 2149-2165.

45 Barbosa-Cabral, C. R., **Lachos, V. H**. and Madruga, R. M. (2012). Bayesian skew-normal independent linear mixed models with heterogeneity in the random effects population. *Journal of Statistical Planning and Inference*, 212,181-200.

46 Cabral, C. R., **Lachos, V. H**., and Prates, M. (2012). Robust multivariate mixture modelling using scale mixtures of skew-normal distributions. *Computational Statistics and Data Analysis*, 56, 226-246.

47 **Lachos, V. H.**, Cabral, C. R. and Abanto-Valle, C. A. (2012). A noniterative sampling Bayesian method for linear mixed models with normal independent distributions. *Journal of Applied Statistics.* 39, 531-549.

48 Ferreira, G.C., Castro, L. M., **Lachos, V. H.**, and Dias, R. (2013). Bayesian modeling of autoregressive partial linear models with scale mixture of normal errors. *Journal of Applied Statistics*, 40, 1796-1816.

49 **Lachos, V. H.**, Castro, L. M. and Dey, D.K. (2013). Bayesian inference in nonlinear mixed–effects models using normal independent distributions. *Computational Statistics and Data Analysis*, 64, 237–252.

50 Matos, L. A., **Lachos, V.H.**, Balakrishnan, N. and Vilca-Labra, F.(2013). Influence diagnostics in linear and nonlinear mixed-effects models with censored data. *Computational Statistics and Data Analysis*, 57, 450-464.

51 Matos, L. A., Prates, M. O., Chen, M-H. and **Lachos, V. H.** (2013). Likelihood based inference for linear and nonlinear mixed-effects models with censored response using the multivariate-t Distribution . *Statistica Sinica*, 23, 1299-1322.

52 Blás, B.G., **Lachos, V. H.** and Bolfarine, H. (2013). Statistical analysis of controlled calibration model with replicates . *Journal of Statistical Computation and Simulation*, 83, 941-961.

53 Prates, M. O., Cabral, M. O, and **Lachos, V. H.** (2013). Fitting finite mixture of scale mixture of skew-normal distributions . *Journal of Statistical Software*, 54, 1-20.

54 Ferreira, G., Castro, L. M., **Lachos, V. H**., and Dias, R. (2013). Bayesian modeling of autoregressive partial linear models with scale mixture of normal errors. *Journal of Applied Statistics*, 40, 1796-1816.

55 Castro, L. M., **Lachos, V. H.**, Ferreira, G. and Arellano-Valle, R. (2014). Partially linear censored regression models using heavy-tailed distributions: A Bayesian approach. *Statistical Methodology*, 18, 14-31.

56 Cabral, C. R., **Lachos, V. H.**, and Zeller, C.B. (2014). Multivariate measurement error models using finite mixtures of skew-Student t distributions. *Journal of Multivariate Analysis*, 124, 179-198.

57 Galvis, D. M, Bandyopadhyay, D. and **Lachos, V. H.** (2014). Bayesian modeling of mixed zero-one-augmented beta regression models, with applications to periodontology. *Statistics in Medicine,* 33, 3759-3771.

58 Garay, A. M., **Lachos, V. H.**, Vilca, L. F. and Ortega, E. M. (2014). Statistical diagnostics for nonlinear regression models based on scale mixtures of skew-normal distributions. *Journal of Statistical Computation and Simulation*, 84, 1761-1778.

59 Costa, D. R, **Lachos, V. H.,** Bazan, J. L. and Azevedo, C. L. N. (2014) Estimation methods for multivariate Tobit confirmatory factor analysis. *Computational Statistics and Data* Analysis, 79, 248 - 260.

60 Prates, M.O., Costa, D. R. and **Lachos, V. H.** (2014). Generalized linear mixed models for correlated binary data with T-link. *Statistics and Computing*, 24,1111-1123.

61 Zeller, C. B., **Lachos, V. H.**, Vilca, L. F. (2014). On estimation and influence diagnostics for the Grubbs' model with asymmetric heavy-tailed Distributions. *Statistical Papers*, 55, 671-690.

62 Ferreira, C. S, **Lachos, V. H.**, and Bolfarine, H. (2014). Inference and diagnostics in skew scale mixtures of normal regression models. *Journal of Statistical Computation and Simulation*, 85, 517-537.

63 Abanto-Valle, C. A., **Lachos, V. H**, and Dey, D.(2015). *Bayesian estimation of a skew-t stochastic volatility model*. *Methodology and Computing in Applied Probability,* 17, 721-738.

64 Massuia, M. B., Cabral, M. O, Matos, L.A. and **Lachos, V.H**. (2015). Influence diagnostics for Student-t censored linear regression models . Accepted for publication in *Statistics- A Journal of Theoretical and Applied Statistics*, 49, 1074–1094.

65 **Lachos, V. H.**, Azevedo, C. L. N, Abanto-Valle, C. A. and Chen, M-H (2015). Quantile regression for censored mixed-effects models with applications to HIV Studies. *Statistics and its Interface*, 8, 203-215.

66 Costa, D. R., Castro, L. M., Prates, M. and **Lachos, V. H.** (2015). Likelihood-based inference for Tobit confirmatory factor analysis using the multivariate t-distribution. *Statistics and Computing, 25, 1163-1183.*

67 Bandyopadhyay, D. Castro, L.M., **Lachos, V. H.** and Pinheiro, H. P. (2015) Joint nonlinear mixed-effects models and diagnostics for censored HIV viral loads with CD4 measurement error. *Journal of Agricultural, Biological, and Environmental Statistics*, 20, 121-139.

68 Garay, A. M., **Lachos, V. H**, and Bolfarine, H. (2015) Bayesian zero-inflated negative binomial regression models: Estimation and case influence diagnostics. *Journal of Applied Statistics*, 42, 1148-1165.

69 Matos, L. A., Bandyopadhyay, D., Castro, L. M. and **Lachos, V. H.** (2015).

Influence diagnostics in mixed-effects models with censored data using the multivariate-t distribution. *Journal of Multivariate Analysis*, 141, 104–117.

70 Garay, A. W., **Lachos, V. H.**, Bolfarine, H. and Cabral, C.R. (2015). Bayesian analysis of censored linear regression models with scale mixtures of normal distributions. *Journal of Applied Statistics*, 42, 2694-2714.

71 Motta, M. R. , Galvis, D. M., **Lachos, V. H**, and others (2015) A mixed-effect model for positive responses augmented by zeros. *Statistics in Medicine*, 34, 1761–1778.

72 Galarza, C.M. and **V. H. Lachos** (2015). Likelihood based inference for quantile regression nonlinear mixed effects models*. Estadistica (Instituto Interamericano de Estadística), 67, 33-74.*

73 Garay, A. W, **Lachos, V. H.** and Lin, Tsung-I (2016). Nonlinear censored regression models with scale mixtures of normal distributions. *Statistics and its Interface*, 9, 281 – 293.

74 Gonzalez, J. A. C., **Lachos, V. H**., Castro, L.M. and Patriota, A. (2016) *A Confidence Set Analysis for Observed Samples: A Fuzzy Set Approach*. *Entropy, 18, 211-220.*

75 Zeller, C. B, **Lachos, V. H.** and Cabral, C.R. (2016). Robust mixture regression modeling based on scale mixtures of skew-normal distributions. *Test*, 25, 375-396.

76 Ferreira, C. S., **Lachos, V. H**. and Bolfarine, H. (2016). Multivariate skew scale mixtures of normal distributions. *Advances in Statistical Analysis*. 100, 421-444.

77 Blás, B.G., **Lachos, V. H**. and Bolfarine, H. (2016). *Heavy tailed calibration model with Berkson measurement errors for replicated data*. *Chemometrics and Intelligent Laboratory Systems, 156, 21-35.*

78 Matos, L. A., **Lachos, V. H**. and Castro, L.M. (2016). Censored mixed-effects models for irregularly observed repeated measures with applications to HIV viral loads, *TEST*, 25, 627-653.

79 Ferreira C.S. and **Lachos, V. H** .(2016). Nonlinear regression models under skew scale mixtures of normal distributions. *Statistical Methodology, 33, 131–146.*

80 Garay, A. W, **Lachos, V. H.**, Bolfarine, H. and Cabral, C.R. (2017). Linear censored regression models with scale mixtures of normal distributions. *Statistical Papers, 58, 247–278.*

81 Galarza, C. M., Bandyopadhyay, D. and **Lachos, V. H.** (2017). *Quantile regression for linear mixed models: A stochastic approximation EM approach*. *Statistics and its Interface, 10, 471-482.*

82 Massuia, M. B., Garay*, A. W., **Lachos, V. H.** and Cabral, C. R. (2017). *Bayesian analysis of censored linear regression models with scale mixtures of skew-normal distributions . Statistics and its Interface, 10, 425-439.*

83 Garay, A. W., Castro, L.M., Leskow, L. and **Lachos, V. H.** (2017) Censored linear regression models for irregularly observed longitudinal data using the multivariate-t distribution. *Statistical Methods in Medical Research,* 26, 542–566.

84 Galvis, D. M., Bandyopadhyay, D. and **Lachos, V. H.** (2017). Augmented mixed models for clustered proportion data. *Statistical Methods in Medical Research,* 26, 880–897.

85 Galarza, C. M., **Lachos, V. H.** Cabral, C. R., and Castro L. M. (2017). *Robust Quantile Regression using a Generalized Class of Skewed Distributions*. *STAT*, 6, 113-130.

86 **Lachos, V. H**., Cancho, V. G., Neto, F. L. and Dey, D. K. (2017). Bayesian analysis of scale mixtures Log-Birnbaum-Saunders regression models with censored data. *Journal of Statistical Computation and Simulation*, 87, 2002-2022.

*87* **Lachos, V. H**., Moreno, E. L., Kun, C. And Barbosa-Cabral, C.R. (2017). Finite mixture modeling of censored data using the multivariate Student-t distribution. *Journal of Multivariate Analysis, 159, 151-167.*

88 ***Lachos, V. H.***, *Larissa, A. M., Barbosa, T., Garay, A. W. and Dey, D. K. (2017).* Influence Diagnostics in Spatial Models with Censored Response*. Environmetrics, 28, 1-21.*

89 Schumacher, L. F., **Lachos, V. H**. and Dey, D. K. (2017). Censored regression models with autoregressive errors: A likelihood-based perspective*. The Canadian Journal of Statistics, 45, 375*-392.

90 Ordoñez, J. A., **Lachos, V. H.,** Bandyopadhyay, D. and Cabral, C. R. B (2018). Geo-statistical estimation and prediction for censored responses. *Spatial Statistics*, 23, 109-123.

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## PAPERS UNDER REVIEW IN PEER REVIEWED JOURNALS

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2. de Alencar, F. H., Matos, L. A. and **Lachos, V. H.** (2022). Finite mixture of censored linear mixed models for irregularly observed longitudinal data. *Journal of Classification* (Under Review).
3. Ordoñez, A. C., Prates, M. O. Bazan, J. L. and **Lachos V. H.** (2022). Penalized complexity priors for the skewness parameter of power links. *The Canadian Journal of Statistics* (Under Review).
4. Dey, D., **Lachos, V. H.**, Wang, X. and Ye, T. (2021). Spatial modeling of insurance claim data using Tweedie distribution. *Journal of Spatial Science* (Under Review).

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Finite Mixture of Multivariate Censored/Missing Data"
https://cran.r-project.org/web/packages/CensMFM/index.html

## OTHER PROFESSIONAL SERVICES

## ORGANIZING CONFERENCES OR WORKSHOPS

1. 3rd Workshop in Survival Analysis and Applications (WASA). Nov. 27 - Nov. 29, 2013 in Campinas, Sao Paulo - Brazil. Chair of the Organizing Committee http://www.ime.unicamp.br/~wasa/

2. The 14th Brazilian School of Regression Models (14 EMR). March. 02 until March. 05, 2015 in Campinas, Sao Paulo - Brazil. Chair of the Organizing Committee and Chair of the Scientific Committee. http://www.ime.usp.br/~abe/emr2015/

3. Model-Based Clustering and Classification (MBC2). 5-7 September, 2016 in Catania - Italy. Member of the Scientific Committee. http://mbc2.unict.it/

4. The 15th Brazilian School of Regression Models (15 EMR). March. 26 until March. 29, 2017 in Pirenopolis, Goiania-Brazil. Chair of the Scientific Committee. http://www.redeabe.org.br/emr2017/

5. The 5th Workshop in Survival Analysis and Applications (WASA-2017). Salvador, Bahia - Brazil. Member of the Scientific Committee.

6. The 14th Brazilian Meeting of Bayesian Statistics (EBEB-2018). March 05-09, 2018 Rio de Janeiro - Brazil. Member of the Scientific Committee. https://bayesian.org/xiv-brazilian-meeting-on-bayesian-statistics-ebeb/

7. The 3rd International Conference on Econometrics and Statistics (EcoSta 2019). 25-27 June 2019, Taichung-Taiwan. Member of the Scientific Committee. http://www.cmstatistics.org/EcoSta2019/

8. The 16th Brazilian Meeting of Bayesian Statistics (EBEB-2022). 16-18 March 2022, Sao Carlos, Sao Paulo - Brazil (Virtual Event). Member of the Scientific Committee. https://eventos.galoa.com.br/ebeb-lacsc-2022/page/1381-home

9. The 2022 ICSA Applied Statistics Symposium. June 19th to June 22th, 2022 at University of Florida, Gainesville. Member of the Scientific Committee. https://symposium2022.icsa.org/committees/

## SERVICE TO THE UNIVERSITY/SCHOOL/DEPARTMENT

### Campinas State University

1. Director of the Undergraduate Program in Statistics. Campinas State University, UNICAMP, Campinas, Brazil. From 2011-2015.
2. Faculty Search Committee [2013, 2014]

### University of Connecticut

3. Chair, Lecturer Search Committee, Department of Statistics [2019, 2020, 2021]
4. Committee Member on Curricula and Courses in the College of Liberal Arts and Sciences (C&C - CLAS).
5. Department of Statistics, Committees Member Fall 2021/Spring 2022:

    - PTR
    - Graduate Admissions
    - Colloquium
    - Course & Curriculum of CLAS
    - Gratis Faculty Appointments
    - Makuch Faculty Fellowship
    - Graduate Students and Distinguished Alumni Awards
    - Graduate Examinations
    - SET+ Faculty Teaching Evaluations
    - VAP/APiR Search Committee
    - Undergraduate Data Science Major Committee
    - Makuch Distinguished Lecture.
    - Organizing Committee of the 60th Anniversary Celebration

### External

1. Elected Council Member of the New England Statistical Society [2021-Present]