Ezequiel Smucler
Curriculum Vitae

Universidad Torcuato Di Tella
Departmento de Matemática y Estadística
Av. Pres. Figueroa Alcorta 7350, C1428 CABA, Argentina
E-mail: esmucler@utdt.edu

CURRENT POSITION

Assistant Professor
Department of Mathematics and Statistics, Universidad Torcuato Di Tella

Lead Data Scientist
Aristas S.R.L.

PAST POSITIONS

Postdoctoral Fellow   2017-2018
Departments of Statistics and of Computer Science, University of British Columbia

EDUCATION

Ph.D. in Mathematics   2014-2016
School of Exact and Natural Sciences, University of Buenos Aires
> Thesis title: 'Robust Estimators for High-Dimensional Linear Regression Models'. Thesis advisor: Victor J. Yohai.

Licenciatura in Mathematics   2008-2013
School of Exact and Natural Sciences, University of Buenos Aires
> Six year degree. Thesis title: 'Highly Robust and Highly Finite Sample Efficient Estimators for the Linear Model'. Thesis advisor: Victor J. Yohai.

RESEARCH INTERESTS

Causal Inference, Statistics for High-Dimensional Data, Dimension Reduction Techniques.

PUBLICATIONS

Published

- Christidis A., Lakshmanan, L., Smucler E. and Zamar R. (2020+): Split Regularized Regression. To appear, *Technometrics.*

- Peña, D., Smucler, E. and Yohai V.J. (2020): gdpc: gdpc: an R Package for Generalized Dynamic Principal Components. *Journal of Statistical Software*, **92**, 1-23.

- Peña, D., Smucler, E. and Yohai V.J. (2019): Forecasting Multiple Time Series with One-Sided Dynamic Principal Components. *Journal of the American Statistical Association*, **114**, 1683-1694.

- Cohen Freue, G.V, Kepplinger, D., Salibian-Barrera, M. and Smucler, E. (2019): Proteomic biomarker study using novel robust penalized elastic net estimators. *Annals of Applied Statistics*, **13**, 2065-2090.

- Smucler, E. (2019): Asymptotics for Redescending M-estimators in Linear Models with Increasing Dimension. *Statistica Sinica*, **29**, 1065-1081.

- Smucler, E. (2019): Consistency of Generalized Dynamic Principal Components in Dynamic Factor Models. *Statistics and Probability Letters*, **154**.

- Forzani, L., Rodriguez, D., Smucler, E. and Sued, M. (2019): Sufficient dimension reduction and prediction in regression: asymptotic results. *Journal of Multivariate Analysis*, **171**, 339-349.

- Bura, E., Duarte, S., Forzani, L., Smucler, E. and Sued, M. (2018): Asymptotic Theory for Maximum Likelihood Estimates in Reduced-Rank Multivariate Generalized Linear Models. *Statistics*, **52**, 1005-1024.

- Smucler, E. and Yohai, V.J. (2017): Robust and Sparse Estimators for Linear Regression Models. *Computational Statistics & Data Analysis*, **111**, 116-130.

- Smucler, E. and Yohai, V.J. (2015): Highly Robust and Highly Finite Sample Efficient Estimators for the Linear Model. In *Modern Nonparametric, Robust and Multivariate Methods: Festschrift in Honour of Hannu Oja* (Nordhausen, K. and Taskinen, S., eds.) 91-108. Springer, New York.

- Grings, F., Bruscantini, C., Smucler, E., Carballo, F., Dillon, M.E., Collini, E., Salvia, M. and Karszenbaum, H. (2015): Validation Strategies for Satellite-Based Soil Moisture Products Over Argentine Pampas. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **8**, 4094-4105.

Pre-prints

- Rotnitzky A. and Smucler E. (2019): Efficient adjustment sets for population average treatment effect estimation in non-parametric causal graphical models. Available at `https://arxiv.org/abs/1912.00306`.

- Smucler E., Rotnitzky A. and Robins J.M. (2019): A unifying approach for doubly-robust l1 regularized estimation of causal contrasts. Available at `https://arxiv.org/abs/1904.03737`.

- Rotnitzky A., Smucler E. and Robins J.M. (2019): Characterization of parameters with a mixed bias property. Available at `https://arxiv.org/abs/1904.03725`.

- Somacal A., Boechi, L., Jonckheere M., Lefieux, V., Picard, D. and Smucler E. (2019): Uncovering differential equations from data with hidden variables. Available at `https:https://arxiv.org/pdf/2002.02250.pdf`

TALKS AND PRESENTATIONS

- Seminars
  - Econometrics Seminar, University of California, Berkeley, USA, 2020.
  - Deparment of Biostatistics, Harvard University, USA, 2019.
  - Deparment of Economics, Universidad de San Andrés, Argentina, 2019.
  - University of Michigan, USA, 2018.
  - Department of Statistics, University of Victoria, Canada, 2018.
  - Department of Applied Mathematics, University of Washington, USA, 2018.
  - Data Science Institute, University of British Columbia, Canada, 2017.
  - Mathematical Statistics Seminar, School of Exact and Natural Sciences, University of Buenos Aires, Argentina, 2017.
  - Statistics Seminar, Department of Statistics, Universidad Carlos III de Madrid, Spain, 2016.
  - Mathematical Statistics Seminar, School of Exact and Natural Sciences, University of Buenos Aires, Argentina, 2016.
  - Mathematics Seminar, Applied Mathematics Institute of the Litoral (IMAL), Argentina, 2015.
  - Statistics Seminar, Federal University of Rio Grande do Sul, Brazil, 2015.

- Workshops and Congresses
  - Oberwolfach Workshop on Foundations and New Horizons for Causal Inference, Germany, 2019.
  - Annual Meeting of the Statistical Society of Canada, Canada, 2018.
  - Workshop Nowcasting & Big Data, Banco Central de la República Argentina, Argentina, 2017.

- CFE-CMStatistics 2016, Higher Technical School of Engineering, University of Seville, Spain, 2016.
- Current and Future Challenges in Robust Statistics Workshop, Banff International Research Station, Canada, 2015.
- Big Data and Environment Workshop, School of Exact and Natural Sciences, University of Buenos Aires, Argentina, 2015.
- Luis Santaló 2014 Winter School, School of Exact and Natural Sciences, University of Buenos Aires, Argentina, 2014.

FELLOWSHIPS

- National Council of Scientific and Technological Research (CONICET) Doctoral Fellowship. April 2015 - July 2017.

- University of Buenos Aires Doctoral Fellowship. September 2014 - April 2015.

- Institute of Pure and Applied Mathematics (IMPA), Brazil, Summer Program Fellowship. January - February 2013.

REFEREE WORK

Refereed for Biometrika, Computational Statistics & Data Analysis, Journal of the American Statistical Association, Journal of Multivariate Analysis, Scandinavian Journal of Statistics and TEST.

SKILLS

Languages	English (fluent)
	Portuguese (fluent)
	Spanish (mother tongue)
Programming	R, PYTHON, MATLAB, C++.
	I co-authored and maintain the gdpc, odpc and SplitReg
	R packages, available on CRAN.