

Sebastian Cadavid-Sánchez

Contact Information	Xochicalco 880, Benito Juárez 03320 Ciudad de México, Mexico.	(+52) 55-7549-3760 s.cadavid1587@gmail.com
Education	Instituto Tecnológico Autónomo de México (ITAM) , México, DF MS in Data Science. Current GPA: 9.36/10	2021 (Expected)
	Universidad de los Andes , Bogotá, Colombia MA in Economics BA in Economics	2017 2014
Employment and Experience	ITAM - Center for Data Science (CDS) Research Fellow, ITAM - Department of Math and Statistics	Nov 2019 - Mar 2021
	ITAM - Center for Economic Research (CIE) Research Assistant, ITAM - Department of Economics	Aug 2019 - Dec 2020
	Center for Latin American Monetary Studies (CEMLA) Research Analyst, Economic Research Department	Aug 2016-Jun 2019
	Congress of Colombia Economic Analyst	Jan 2015-Sep 2015
Complementary Education	Human Artificial Intelligence for Human Development Universidad de los Andes	Summer 2020
	Ethics in Artificial Intelligence ITAM	Summer 2020
	Regime-Switching in VAR and DSGE models Norges Bank and BI Norwegian BS	Jan 2018
	Advanced Macroeconometric Forecasting IMF and CEMLA	Sep 2017
Work in Progress	<i>Early Warning System of Dropouts at Undergraduate Levels</i> (with CDS Research Team) Early Warning System to identify undergraduate ITAM students in scholar vulnerability in the next two years. In particular, we used metrics based on assistive or punitive actions to optimize the models, performed temporal cross-validation, and used existing methodologies for analyzing algorithmic bias and fairness among student groups. My responsibilities included structuring databases, exploring data patterns, and implementing training and validation of machine learning models to generate risk score predictions for each student. <i>School Markets in Mexico</i> (with Dr. M. Romero and P. Mejía) Research assistance to generate school markets to understand the migration mechanisms of students among institutions. Responsibilities included: constructing and validating master database containing geographical information about nearly 230,000 Mexican schools. With this database, we generated spatial geometry analysis to construct commuting zones. Using graph algorithms, we detected communities by utilizing bidirectional migration data of more than one million students.	

Software	Python, R, SQL, MATLAB, STATA, Bash, Docker, Git, AWS, L ^A T _E X	
Teaching Experience	TA Intermediate Macroeconomics, Universidad de los Andes Instructors: D. Perez-Reyna and D. Zambrano Riveros	Winter 2016
Courses Organized	Regime Switching in VAR and DSGE models CEMLA	Nov 2018
	DSGE models in the Policy-Making Process CEMLA and International Monetary Fund (IMF)	Mar 2017
Research Documents (Economics)	<p>Monetary Policy and Structural Changes in Colombia, 1990-2016: A Markov Switching Approach. Centro de Estudios de Desarrollo Económico CEDE No. 60, Universidad de los Andes, 2018.</p> <p>Monetary and Fiscal Policy Interactions in Mexico, 1981-2016 (with Dr. Alberto Ortiz Bolaños and Dr. A. Martínez Fritscher). Under revision: Journal of Macroeconomics</p>	
Chapters in Books	<p>Did the Introduction of Inflation Targeting Represent a Regime Switch of Monetary Policy in Latin America? (with Dr. Alberto Ortiz Bolaños). <i>Inflationary Dynamics, Persistence, and Prices and Wages Formation</i>. Editorial CEMLA, 2020.</p> <p>Targeting Long-term Rates in a Model with Financial Frictions and Regime Switching (with Dr. Alberto Ortiz Bolaños and Gerardo Kattan-Rodriguez). In: <i>Monetary Policy and Financial Stability in Latin America and the Caribbean</i>. Editorial CEMLA, 2018.</p>	
Conferences and Seminars	XXII CEMLA's Annual Meeting of the Central Bank Researchers Network. Banco de la República, Bogotá, Colombia	Nov 2017
	Workshop on Nonlinear Models in Macroeconomics and Finance for an Unstable World (Poster Session). Norges Bank, Oslo, Norway	Jan 2018
Awards	Departamental Fellowship, ITAM Faculty of Mathematical, Statistical and Actuarial Sciences	2019-2020
	XXXIV Prize for Financial and Economic Research , USD 5000 Organized by Ernst & Young and IMEF (with with Dr. A. Ortiz Bolaños and Dr. A. Martínez Fritscher)	2018
References	<p>Dr. Mauricio Romero Londoño Assistant Professor of Economics, ITAM and CIE 52-55-5628-4000 (ext. 2965), mtromero@itam.mx</p> <p>Dr. Adolfo De Unanue Research Director, Escuela de Gobierno y Transformación Pública, Tecnológico de Monterrey unanue@tec.mx</p> <p>Dr. Rodrigo Mendoza Smith CEO Quine, r@quine.sh</p> <p>Dr. Alberto Ortiz Bolaños General Director, FONACOT, alberto@albertoortiz.net</p>	