Artur Bezerra de Carvalho

Chicago, IL 60601 | 1 312-772-4270 | abcarvalho@uchicago.edu

EDUCATION	University of Chicago, PhD Economics 2021 Thesis Project: "Corporate Debt Standardization and The Rise of Electronic Bond Trading" Getulio Vargas Foundation, MA Economics 2010 Federal University of Rio de Janeiro, UFRJ, BA Economics 2008	
Data Science Experience		
	Junior Data Scientist Intern - Algorithmic Trading Technology	New York, NY
	 □ Participated in development of electronic corporate bond trading programme for US market □ Produced reports documenting the firm's data sources and describing the identification and processing of relevant trading data and proprietary variables; □ Assisted the data engineering group validate their implementation in Java of the data science 	
	team's pricing algorithms written in Python.	
	☐ Wrote code to identify whether bonds belonged to a particular IG corporate bond index; ☐ Deployed simple Machine Learning classification algorithms to impute missing data.	
RESEARCH EXPERIENCE	University of Chicago, PhD Dissertation	2021
	Advisor: Prof. Pietro Veronesi	
	 Developed structural model of credit risk to analyze trade-off between informational costs and liquidity gains associated with standardization of electronically traded bonds; Employed computational methods in Python and Julia, including multivariate interpolation 	
	grid search and parallelization in remote machines, to solve the	infinite-horizon model.
	MIT Sloan School of Management	February to June 2016
	Research Assistant to Professor João Granja	
	 Leveraged data on regulatory reports to assess the impact of heightened capital requirements on bank activity; Studied how de novo banks' asset growth, residential mortgage credit concession and secu- 	
	ritization change in response to loosened leverage ratio requirements.	
TEACHING & OTHER EXPERIENCE	University of Chicago	Fall 2013 to Spring 2021
	Teaching Assistant: Booth (MBA), Financial Mathematics (MS), Dept. of Economics (BA)	
	 Conducted in-person and online sessions covering course material, programming skills, as signments and exam solutions. Wrote teaching notes, solutions to problem sets and exams. Courses: Fintech Revolution, Financial Derivatives, Option Pricing, Time Series Econome trics, among others. 	
	Getulio Vargas Foundation - EPGE	Summer 2009
	Teaching Assistant, MA, Macroeconomics II	
	Banco BBM (former Bank of Bahia)	May to Dec 2006
	Internship - Corporate Credit Area	Rio de Janeiro, Brazil
Honors & Awards	The University of Chicago Social Sciences Fellowship, 2010-15	
	Brazilian government fellowship for Master's Studies, 2008-10	
COMPUTER SKILLS	Julia, Python, Git, IATEX, MS Excel, MS Office	
Additional Information	Language Skills: English (fluent), Portuguese (native), Spanish (conversational)	
	Citizenship: Brazilian (J1 U.S. Visa)	

 $\textbf{Website:}\ \ \text{https://abcarvalho.github.io/}$