Jacqueline Araya
DATA SCIENTIST

London, UK

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Education

Columbia University
M.SC. IN DATA SCIENCE

New York, NY

2018-2020

- Algorithms for Data Science, Statistical Inference, Machine Learning, Deep Learning, Data visualization, Computational systems and Databases, Product Recommendation, Causal Inference
- Capstone Project: "Asset tracking: identifying patterns in spatio-temporal trajectory data" in collaboration with GE Research Center

University of Chile
PROFESSIONAL ENGINEER - INDUSTRIAL ENGINEERING

Santiago, Chile

2008 - 2015

- Statistics for Business and Economics, Applied Econometrics for Business and Economics, Operations Management, Marketing Strategy, Marketing Analytics, Consumer Behavior, Financial Analysis, Financial Engineering, Data Mining, Data Warehousing, Industrial Organization, Information and Communication Technologies for Management
- Thesis: "Analysis of scientific virtual communities of practice"

University of Chile
BSC. IN ENGINEERING SCIENCE

Santiago, Chile

2008 - 2013

- Single and Multivariate Calculus, Linear Algebra, Ordinary Differential Equations, Computer Science, Electromagnetism, Probability and Statistics, Modeling and Optimization, Operations Research, Microeconomics, Macroeconomics

Technical Skills

PYTHON	Numpy, Pandas, TensorFlow, Keras, Scikit-Learn, Matplotlib, NLTK, PySpark, Web Scraping
R	ggplot, dplyr, tidyr
DOCUMENTING	Git, Jupyter, RMarkdown, Latex
LINUX	Command line, bash
OTHERS	SQL, Stata, Matlab, Java

Professional Experience

Columbia Business School
DEAN'S RESEARCH ASSOCIATE

New York, USA

2016 - 2018

- Worked directly with the Management Division faculty over two years in applied research projects related to organizational behaviour, entrepreneurship, firm strategy, labour market dynamics and others
- Performed data collection (web scraping, APIs, text extraction from documents/databases), data cleaning and processing (unstructured and structured data, merge different sources, handling missing data, check for consistency/robustness and others), and data analysis (multinomial logistic regression, factor analysis, text analysis, natural language processing, social network analysis)
- Deployed and executed field experiments using automated scripts that interact with a consumer-facing platform
- Mentored research assistants in the use of Linux-based high performance computing servers and helping summer interns and PhD students with a variety of coding issues
- Worked closely with the Information Technology Group Director to assist in the adoption of new Linux-based tools within the research community of Columbia Business School

Nic Chile Research Labs
PROJECT ANALYST

Santiago, Chile

2012 - 2015

- Nic Labs is the research lab associated with the national Domain Name Service of Chile. Its objective is the study of Internet protocols, communication networks, and complex networks
- In charge of project applications for public funding, effectively securing up to USD 40,000 for one of our major projects
- Proposed business models for software and tools developed by our software engineering team
- Forged a public-private partnership with one of the largest Internet service providers of the country to financially support a novel app produced by our software engineering team that measures the quality of service of mobile Internet at a national level

BCI S.A.
DIGITAL MARKETING INTERN

Santiago, Chile

Summer 2012

- The Bank of Credit and Investment (BCI) is one of the major banking corporations in Chile. Analysed data from different credit services offered to clients online in order to develop new digital marketing strategies to target large companies as well as entrepreneurs

Academic Experience

Centre for Business Intelligence (CEINE), University of Chile *Santiago, Chile*

Researcher (Engineering Thesis) *2013 - 2014*

- Applied natural language processing methods (NLP), estimated probabilistic topic models (LDA), and performed a social network analysis in Python to model and study the relationships of academic areas and their dynamics from published articles produced by their members, building a relationship network based on content rather than co-authorship. In this research, I discovered new and novel information from the content network for those communities, highlighting the value hidden in unstructured data for better understanding the dynamics of these networks

University of Notre Dame *South Bend, IN, USA*

Intern *Summer 2014*

- Academic internship at iCeNSA (Interdisciplinary Center for Network Science and applications). Worked exploring ways on how to build a network that would feed on multiple economic news and conditions to predict future crises in Latin American countries

Volunteer Experience

Latino Impact Summit *New York, USA*

Logistics Volunteer at UN *December 2018*

- The PVBLIC Foundation organizes the annual "Latino Impact Summit", an initiative created in partnership with the United Nations Conference for Trade and Development (UNCTAD) at the UN headquarters in New York. The summit brings together leaders who generate partnerships for the progress and growth of America, proposing solutions related to the 2030 Sustainable Development Agenda
- Assisted in a variety of roles from receiving guests to timekeeping during talks and panels and solved guest's issues

LatinCrypt *Santiago, Chile*

Organizing Committee *October 2012*

- Organizing Committee of "Second International Conference on Cryptology and Information Security in Latin America, LatinCrypt" for the Department of Computer Science of Faculty of Physics Sciences and Mathematics of University of Chile

Academic Honors

CONICYT (Commission for scientific and technological research of Chile) *Santiago, Chile*

CONICYT Scholarship *Summer 2014*

- Scholarship for short stays abroad for engineers to travel and work as intern in Notre Dame University's iCeNSA (Interdisciplinary Center for Network Science and applications) in South Bend, IN, United States

University of Chile *Santiago, Chile*

Dean's List Industrial Engineering *2012, 2013*

- For obtaining a GPA of 5.7 or above (scale ranges from 1 to 7)

Teaching Assistantship

University of Chile *Santiago, Chile*

Information and Communications Technologies for Management *2011 - 2014*

University of Chile *Santiago, Chile*

Statistics for Business and Economics *2011 - 2012*