

Maximilian A. Rodrigues

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EDUCATION

DEPAUL UNIVERSITY, COLLEGE OF COMPUTING – CHICAGO, IL **June 2021**
M.Sc. Data Science, Computational Methods Concentration
GPA 4.0/4.0

DEPAUL UNIVERSITY, COLLEGE OF BUSINESS – CHICAGO, IL **June 2012**
B.Sc. Finance

KEY PROJECTS

IDENTIFYING COVID-19'S IMPACT ON PUBLIC TRANSPORTATION RIDERSHIP [VIEW DETAILS HERE](#)

- Collected data from open-source APIs to visualize and tell a story on who was most affected by COVID-19 regarding public transportation in Chicago (paper submitted to Journal of Public Transportation)
- Used R and Shiny to develop publication ready visualizations and interactive tools showing behavioral patterns
- Applied statistical tests to show differences between demographic groups and geographical difference

IDENTIFY VULNERABLE HOUSEHOLDS WITH PROXY MEANS TEST [VIEW DETAILS HERE](#)

- Applied machine learning techniques to predict the income level of homes using attributes from a proxy means test
- Applied feature engineering, data reduction techniques, rebalancing techniques, and hyperparameter optimization in Python (Jupyter)

MACHINE LEARNING ALGORITHMS FROM SCRATCH [VIEW DETAILS HERE](#)

- Using a Kaggle dataset, developed machine learning algorithms without the use of Python machine learning packages
- Wrote code for a decision tree, logistic regression model and KNN model with Python Numpy

TECHNICAL SKILLS

- Python (sklearn, pandas, numpy, scipy, matplotlib, seaborn, keras, tensorflow) and R (ggplot2, tidyverse, Shiny)
- Data Visualization (ggplot2, matplotlib, seaborn, Tableau, Shiny)
- Database Processing (SQL)
- Analytic Software (Jupyter, SPSS, SAS, Excel)
- GIS Tools (ArcGIS, R GIS Packages)
- VBA for Excel

PROFESSIONAL EXPERIENCE

CLARO HEALTHCARE – CHICAGO, IL

Claro Healthcare is a healthcare consulting firm focused on improving the quality ratings and financial accuracy for hospitals and health systems.

DATA ANALYST

March 2018 – Present

- Modified several tools using Excel VBA to create macros that improve efficiency of monthly client deliverables (in one case, reduced time from 20 hours a month per client to 2)
- Helped develop data processing and analytics queries in SQL to aggregate data for use in Tableau
- Use Excel pivot tables, logic functions, and other techniques to prepare data to build client reports

MaritzCX – CHICAGO, IL

MaritzCX was a customer experience market research company that provided consumer data analysis.

MARKETING RESEARCH INTERN

January 2018 – March 2018

- Built an analysis tool with Excel for a client that allows the user to easily view performance metrics at different store locations
- Created client deliverables using Excel, Powerpoint, and MaritzCX proprietary reporting software

YALE UNIVERSITY – New Haven, CT

In the Psychology department at the University, worked as a behavioral economics researcher

RESEARCH ASSISTANT

Summer 2017

- Designed and implemented experimental behavioral economics studies using Qualtrics survey software
- Used Excel to process data, perform regression, and applied other statistical analyses for the purposes of publishing results

GUGGENHEIM INVESTMENTS – CHICAGO, IL

A global asset management and investment advisory division focused on the return and risk needs of various business entities and high net-worth investors.

FUND ADMINISTRATION ASSOCIATE

July 2013 – May 2015

- Prepared monthly advisory fee schedules for all closed-end and exchange-traded funds
- Monitored and paid expenses for all closed-end, exchange-traded, and open-end funds
- Ran fund reports in the BNY Mellon Inform system and Sungard InvestOne system
- Reconciled expenses paid with the general ledger

DATA INTEGRITY ANALYST (INTERN)

Summer 2011

- Provided support to intermediary sales team that distributes financial products to broker/dealers by maintaining data integrity of client database (Salesforce)

PUBLICATIONS/WORKING PAPERS

Samuel G.B. Johnson, **Max Rodrigues**, and David Tuckett. Moral tribalism and its discontents: How intuitive theories of ethics shape consumers' deference to experts. J Behav Dec Making. 2020; 1 - 19 Available at: <https://onlinelibrary.wiley.com/doi/full/10.1002/bdm.2187#pane-pcw-references>

Max Rodrigues & Ilyas Ustun. Impact of local government's COVID-19 reopening guidelines on Chicago public transportation. Capstone paper for DePaul's MS in Data Science program. Available [here](#):

Samuel G.B. Johnson, Gregory Murphy, **Max Rodrigues** and Frank Keil. Predictions from Uncertain Moral Character. Available at: <https://cogsci.mindmodeling.org/2019/papers/0105/0105.pdf>

VOLUNTEER ROLES

- Weekly math tutor (*Tutoring Chicago*)
- Assistant basketball coach (*Chicago Prize Hoops*)

OTHER

- DePaul University Division I Cross Country/Track & Field Scholarship Athlete
- Passed the CFA Level I exam