New York, NY, USA 10033 (929) 235-3220

OBJECTIVE

Curious Data Scientist with strengths on data mining, interactive visualization & machine learning models. Interested in working at an innovative company where I can grow my skills along with a team of talented and creative professionals.

WORK EXPERIENCE

Data Science Intern @ Kora Management LP.

(June - Aug 2016, NY)

- Web scraping and Spark for big data collection, aggregation and analysis.
- Applied feature engineering on unsupervised learning models to track companies' performance.
- Developed apps with Shiny and D3 to monitor processes and analyze data interactively.

Data Science Intern @ Trinnacle Capital Mgmt. (Feb – May 2016, NY)

- Used non-traditional sources of data to model companies' revenue.
- Applied statistical learning techniques, feature engineering and cross-validation on investment strategies.
- Developed interactive dashboards for data analysis and exploration (Shiny).

Senior Associate (Market Data Productions) @ MSCI (Jan 2010 – Aug 2015, MX)

- Started as intern and grew to leader of the Market Data Team, managing 3 analysts.
- Developed interactive Spotfire dashboards used by analysts to perform daily QA on >10,000 time series.
- Developed automated reporting scripts in R for risk models validation.
- Coordinated projects with the global Research and Project Management teams.

DATA SCIENCE PROJECTS (masta-g3.github.io)

Geospatial Analysis of Gentrification in NYC (Dec 2015): Geospatial analysis of the gentrification phenomenon on the NYC area (*R, QGIS, CartoDB*).

CULPA Sentiment (Feb 2015): Sentiment analysis and visualization of academic course ratings. (*Python, HTML, D3*).

MoMA Through Time (Feb 2015): Visualization of exhibitions patterns on the museum; awarded best of the contest (*R*, *HTML*, *D3*).

Summer Networks (Summer 2016): Several tutorials and experiments on Neural Networks, trying to build a RNN that can write short poems.

ACADEMICS

M.S. in Data Science (Dec 2016, Columbia University, GPA 3.4).

- Relevant Courses: Algorithms, NLP, Machine Learning, Data Visualization, GIS Spatial Analysis, Distributed Computing.

B.Sc. in Economics (Dec 2009, Monterrey Tech, GPA 3.5).

- Relevant Courses: Econometrics & Time Series, Multivariate Analysis, Statistics, Mathematics for Engineering, Linear Algebra.
- Published Social Evaluation of the Caritas' Food Bank Program at ITESM's Journal of Economics (Year 2, Vol. 2, 2009).

CONTINUING EDUCATION

Global Association of Risk Professionals (Jan 2014).

- Certified Financial Risk Manager (FRM).

John Hopkins University (March - Sept 2014).

- Online Courses: Data Scientist Toolbox, R Programming, Exploratory Data Analysis, Getting and Cleaning Data.

VOLUNTEER WORK

Course staff for Columbia's on edX:

- Statistical Thinking for Data Science and Analytics (Dec 2015 $-\,$ Jan 2016).
- Machine Learning for Data Science and Analytics (Jan Feb 2016).

KEY SKILLS & COMPETENCIES

 $\textbf{Visualization:} \ \mathsf{SpotFire,} \ \mathsf{Shiny,} \ \mathsf{D3} \ \& \ \mathsf{P5.js}.$

Programming: R & Python.

DB & Cloud Computing: SQL, AWS & Spark. **GIS Analysis:** QGIS, GeoDa & CartoDB.

Web: HTML, CSS & JS.

MAIN INTERESTS

Machine & deep learning, data mining, web scraping, dashboards, interactive visualizations, creative coding, social and spatial data.