Sebastian Garcia

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Professional Experience

Revenue Optimization Analyst | Pulsepoint Inc. | Nov 2016 - Present

- Used Python, SQL, and Excel to automate, extract, pre-process, and present meaningful data to maximize account revenue and efficiency
- Created automated web browser in Python to identify accounts sending masked inventory
- Created scraping tool in Python to determine root causes of misconfiguration errors
- Work in progress – JIRA ticketing system recommendation engine
- Work in progress – landing page logo scraping and Google vision API combination to assure ad quality
- Managed multiple projects through JIRA queue

Yield Analyst | AOL Inc. | Nov 2015 – Nov 2016

- Consulted multiple Account Executives within book of business to maximize revenue. Supported over 90 publishers grossing greater than $2 million monthly
- Used SQL and Tableau to streamline reporting processes and provide data to AEs for deal negotiations and post-sales strategy
- Designed QBR decks for AE's and attended client meetings to help drive conversation towards how to improve partnership

Projects and Courses

Neural Networks and Deep Learning | Coursera – Deeplearning.ai

- Completed with certificate August 2017
- Developed logistic regression, shallow neural network, and deep neural network algorithms from scratch in python. This included:
  - Image reshaping
  - Vectorization
  - Computation graphs
  - Derivations for forward and backwards propagation
  - Caching
  - Activation functions (sigmoid, tanh, relu)
  - Network architecture
  - Hyperparameter tuning

Statistical Learning | Stanford Online

- Completed with certificate and distinction (receiving at least 90% on course) July 2017
- Course combining machine learning and statistics using R. Topics included:
  - Hypothesis testing and confidence intervals

- Multivariate linear and logistic regression
- Discriminant Analysis and Naïve Bayes
- Cross-validation and resampling methods (bootstrap)
- Best-subset selection
- Shrinkage methods (ridge and lasso)
- Dimensionality reduction
- Smoothing splines
- Bagging, boosting, random forests
- Hierarchical clustering

Python for Data Science and Machine Learning Bootcamp | Udemy

· Completed with certificate April 2017
· Used python packages numpy, pandas, matplotlib, seaborn, and scikit-learn for data analysis and machine learning, with brief introduction to spark

Introduction to Data Science in Python | Coursera – University of Michigan

· Completed with certificate February 2017
· Introduction course for data manipulation using numpy and pandas packages in python

RMOTR Advanced Python Programming Bootcamp | rmotr.com

· Completed November 2016
· Four week bootcamp for advanced methods in python
· Topics covered included:
  - Collections and data structures
  - Functional programming
  - Advanced object oriented programming (magic methods, mixins, etc.)
  - Iterators and generators
  - Decorators
  - Web development with Flask

Introduction to Computer Science and Programming in Python | edx - MIT

· Completed without certificate February 2016, completed with certificate November 2016
· Introduction to algorithms, computation, data structures, and objects using python

Analytics Edge | edx - MIT

· Completed with certificate July 2016
· Application of machine learning algorithms using R

Machine Learning | Coursera - Stanford

· Completed with certificate April 2016
· Introduction to theory of machine learning using Octave. Topics included:

- Linear regression
- Cost functions
- Gradient descent
- Logistic Regression
- Support Vector Machines
- K-means
- Principal component analysis
- Neural networks
- Backpropagation

Education

Master of Science | May 2015 | Columbia University School of Engineering and Applied Science

- Major: Industrial Engineering- Operations Research
- Related coursework: Deterministic Models, Stochastic Models, Business Analytics, Simulation

Bachelor of Science | May 2013 | Columbia University School of Engineering and Applied Science

- Major: Civil Engineering
- Related coursework: Risk and Uncertainty in Infrastructure

Skills & Abilities

Python

- Primary focus on data analysis and machine learning. Packages used most frequently include pandas, numpy, seaborn, matplotlib, and scikit-learn
- Secondary focus involves scraping, parsing, and automation using primarily the requests, selenium, and json packages in scripts called by batch files

SQL

- Used SQL and its various implementations including Vertica, MS-SQL and Impala to write queries and edit existing queries, create personal user table, and ingest data

R

- Used R mostly at the academic level for machine learning algorithms and visualizations

Tableau

- Created and edited dashboards connected to SQL databases for data visualizations

HTML, CSS, Javascript

- Basic understanding and coding skills for these web development languages

Extracurricular

Dancing

- Active competitive member and mentor for Columbia's ballroom team since 2010 (mentor since 2014)
- Practiced and performed with various salsa and bachata teams in New York
- Taught solo lessons and group lessons to students and adults

Weightlifting and Fitness

- Active weightlifter since 2008
- Became a personal fitness trainer in 2010 and created training regimens
- Developed healthier recipes in line with personal goals leading to a 25lb weight loss in 2015