Ryan C. D'souza

Greater New York City Area

(609) 915 – 4930 • dsouzarc@gmail.com • linkedin.com/in/dsouzarc • github.com/dsouzarc

Education

Rutgers University School of Arts and Sciences Honors Program, May, 2019

Bachelors of Science in Computer Science and Cognitive Science, GPA: 3.40/4.0

Activities & Awards: Rutgers Student Managed Fund, 1st Place PwC Consulting Challenge

Employment

The New York Times Data Engineering Intern, New York, New York   *Summer, 2017*
American newspaper and global media organization

- Created a high-dimensional and high-volume **dataflow pipeline** to **analyze and forecast subscriber usage** for revenue purposes; data is then reported to stakeholders
- Optimized the ETL process by rewriting SQL queries and fine-tuning the PySpark job and DataProc cluster to run **87% faster at 10% of the cost**
- Tuned **support vector regression algorithms** to **predict potential subscribers** given their usage patterns and the patterns of paid subscribers

Symphony Software Engineering Intern, New York, New York   *Summer, 2016*
Communications platform founded by Goldman Sachs and funded by several Wall Street firms

- Implemented a new ElasticSearch data model that uses **80% less space** while **reducing search time by 30%**, with enhanced search accuracy
- Fixed several security vulnerabilities and other severe bugs, while writing BDD test cases
- Won "Best Intern" and "Best Financial Services" awards at the company-wide **Bot-a-thon**

Previous: CommVault (CVLT). (Tinton Falls, New Jersey)   *Summer, 2015*
          Javelin Capital Markets, LLC. (New York, New York)   *Summer, 2014*

Projects

iMessage Analyzer, Mac Application   *2016*
Analyzes all of a user's messages from the database on the computer
- Shows how friendships and texting habits change over time
- Predicts time of next contact given the duration between all prior contacts
- Automatically generates replies using decision trees

Rutgers University, Part-Time, New Brunswick, New Jersey   *2016*
Open System Solutions – primary developers for Rutgers University's services
- One of two developers for the Rutgers iOS app with tens of thousands of daily users

Tinder Bot, Python GUI   *2017*
A Tinder bot that does the swiping for you
- Uses OpenCV to identify the face and certain facial components, and a neural network to predict swipes based off of facial components ie. hair/eye color

Instagram Analyzer, Python Script   *2017*
Helps with caption generating and finding the best time to post
- Utilizes TensorFlow and OpenCV to detect objects in images, a RNN to generate a caption, and then Markov Chains to generate a meaningful caption

Languages & Technologies

- **Experienced:** Java (several paradigms), Python, SQL, Objective-C (Cocoa & iOS), R
- **Familiar:** Pandas, NumPy, Spark, PySpark, JavaScript (UDFs), Bash, Vim, Git, C, LDIF
- **Other Frameworks:** ElasticSearch, scikit-learn, Spring, JUnit, JBehave, Kafka, MBean