239 53rd Street, 2 Floor
Brooklyn, NY 11220

EDGAR VELAZQUEZ

www.edgaravelazquez.com

(347) 466-8779
edantonio505@gmail.com

EMPLOYMENT

Software Engineer – Machine learning **Blue World** **Fall 2016 - Current**

- Reduced development time for projects from 2 months to 2-3 weeks by creating a command line scaffolding system.
- Accelerated manual data collection time by 92% through automation of data parsing process using machine learning.
- Improved manual product classification task by using Machine Learning and Natural language processing to classify products by description.
- Enhanced time complexity in financial data visualization algorithms from O(n^2) to O(n) by using hash tables.
- Reduced PDF report generation time from 5 minutes to ~5 seconds by switching programming language from PHP to C++ in the software structure.

Full Stack Engineer **Markets Group** **Fall 2015 – Spring 2016**

- Provided continued maintenance and development of bug fixes and patch sets for existing web applications.
- Reduced time complexity from O(n^2) to O(n log n) by redesigning the algorithm structure in data processing.
- Improved HTTP request response performance by 20% through the implementation of one direct SQL request and removing the overhead of several inefficient SQL requests.
- Recommended architectural improvements, design solutions and integration solutions.

Software Development Engineer **Taxi Depot** **Fall 2010 – Spring 2014**

- Modified existing software to correct errors, upgrade interfaces and improve performance.
- Designed and developed the platform for inventory tracking and database.
- Improved taximeter readings by applying standard fare calculations and programming in different automobile models.

EDUCATION

New York, NY **Udacity** **Sunmer 2017 - Fall 2017**

- Machine Learning Nano Degree.

Sioux Center, IA **Dordt College** **Fall 2008 - Summer 2010**

- Bachelors of Arts Graphic Design.

TECHNICAL EXPERIENCE

Projects

- **Dog Breed Classifier** (2017). Built an algorithm to identify canine breed given an image of a dog. If given an image of a human, the algorithm identifies a resembling dog breed.
- **Reinforcement Learning Smartcab** (2017). An agent (smartcab) that can learn from its rewards and mistakes to get to its destination using reinforcement learning.
- **SP500 Stock Price Predictor** (2017). Predict the trend of the S&P 500 with data analysis and machine learning using sentiment polarity score from the New York Time headlines.
- **Customer Segments** (2017). Use unsupervised machine learning clustering algorithms to make a distinction of customers given their buying habits.
- **Talent Lodge** (2016 - 2017). Web application that showcases musicians and performer profiles gathering all of the users portfolios to one place like a database and search engine that lets you search talented individuals by their skill set.

ADDITIONAL EXPERIENCE AND AWARDS

- **UGroup Organizer (2017):** Organizer of the new Udacity pilot program where students and alumni get together to study computer science related subjects and to socialize.

Languages and Technologies

- C++(some experience), Python (proficient), PHP(proficient), Javascript (proficient), SQL(experienced), Machine Learning (experienced), Unix (proficient).