

MICHAEL DIAZ

DATA SCIENTIST & EVERYTHING DEVELOPER



SUMMARY

As a Data Scientist and Developer, I combine the ability to sort, analyze, and visualize complex datasets into interactive charts. I can also take a project from an idea, to prototyping, to production. Ability to contribute to the full life-cycle of software development through Agile methodologies in a team or independent, as needed.

TECHNICAL SKILLS

Data Analysis, Statistical Modeling, Machine Learning

Python, Javascript (Object-Oriented Programming Languages) Scikit-learn (Machine Learning), Pandas (Data

WORK EXPERIENCE

2018-Present

Data Science Instructor

Rutgers School of Continuing Studies

- Lead lectures and educational programming activities
- Create a positive, motivated, and supportive learning environment
- Provide actionable insights and expertise to turn data into actionable recommendations
- Provide instruction in multiple domains ranging from Python, SQL and No-SQL Databases, Javascript, HTML/CSS, API Interactions, Social Media Mining, Hadoop, Tableau, ML, and R.

2018-2019

Football Analyst

Worcester Polytechnic Institute

- Developed intricate algorithms based on deep-dive statistical analysis.
- Analyze complex data sets using advanced querying, visualization and analytics tools.
- Identified, measured and recommended improvement strategies for KPIs across all team performance areas.

2014-2018

Technology Teacher

Passaic City Gifted and Talented Academy

- Utilized student data to provide individual instruction on gathering, parsing, and implementing student data for accommodations.
- Provide students with visual and tactile learning opportunities through use of Interactive Whiteboards
- Use communication software, like ClassDojo, to facilitate open communication with parents
- Led in teacher workshops/private instructions on logging student achievement into software like Google Sheets, Powerschool, and Gradebook.

PROJECT EXPERIENCE

2018- June

Project Alpha Quake (Earthquake location app)

Chief of Data Visualization & Creativity

Frames), Matplotlib & Seaborn & Plotly & D3 & Leaflet & Mapbox (2D Visualizations), Flask (Web Framework), BeautifulSoup (Web Scraping), Requests (API), Flexbox, CSS Grid

Business Intelligence Platforms

Excel, Tableau

Fast querying, sorting, reporting and powerful visualizations of Data.

Databases

MongoDB, MySQL

Distributed & Relational Databases. Collect, store, protect, and retrieve sensitive data.

Front-End Development

Big Three HTML, CSS, JS, D3

jQuery & D3 (DOM Manipulation, Event Handling, Animation, Ajax), CSS Grid & Flexbox (Template Styling), Bootstrap (Web Framework)

- Led in decisions regarding & created:
 - Data from USGS and evaluate implementation of GeoJson in visualizations.
 - Prototype all features of the life-cycle of the application construction.
 - Construct custom visualizations using multiple JS Framework and Libraries.
 - Delegated roles, duties, and deadlines to team for role within project.
 - [Created the Presentation Slideshow](#)

2018- April

NFL Analysis: Deep Dive into the best and worst teams

(Python correlation analysis)

Chief of Data Visualization & Creativity

- Led in decisions regarding & created:
 - Visualize data & correlations with matplotlib (Python)
 - Construct & Sort Data Frames (Pandas)
 - Delegated roles, duties, and deadlines to team for role within project.
 - API & Web Scrape NFL Data
 - Created the presentation slideshow

2018- April

PyMongo & Web Scrape

- Web Application for scraping Space Data
 - Use of BeautifulSoup & Browser Library
 - Sorted into lists, dictionaries and DataFrames
 - Connected to MongoDB through Flask

EDUCATION

Graduation Date: July 2018

Rutgers Data Science Continuing Studies: Rutgers University

Graduation Date: May 2013

Bachelor of Arts- Elementary Education (B.A.): Kean University

CERTIFICATIONS

- Python for Data Science Essential Training (Lynda)
- MongoDB (Lynda)
- HTML Essential Training (Lynda)
- CSS Essential Training (Lynda)
- JS Essential Training (Lynda)
- D3 Visualizations (Lynda)