

MICHAEL C. RUGGIERO

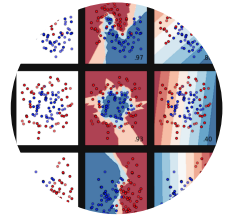
Data Scientist

@ michael@mcruggiero.com

781-866-2191

www.mcruggiero.com

github.com/mcruggiero



PROJECTS AND EXPERIENCE

Data Scientist

Breanna Lungo-Koehn for Mayor

2019 - Present

Medford, Massachusetts

- **Scikit-learn:** Charted and mapped canvassing strategies.
- **NLP:** Scrapped 2000 partisan subreddits for essential information.
- **Python, SQL:** Built interactive database for non-technical volunteers.
- **Geolocating:** Built interactive ArcGIS visualizations to chart progress.
- **Management:** Organized routing and phone banking for canvassers.

Data Science Immersive

General Assembly

2019

Boston, Massachusetts

- **Machine Learning:** Simulated traffic based on Google API.
- **Algorithm Design:** Dispatched police and rescue for simulation.
- **Pytorch, RL:** Designed reinforcement AI system based on video feed.
- **Networkx:** Built graph representation for all Medford roads and traffic.
- **Python, Web scraping:** Identified road closures based on MassDOT API.

Simulations Consultant

Lay's Potato Chips

2015 - 2017

Remote Contract

- **Python, C++:** Incorporated tensors, inertia and friction into engine.
- **3D Meshing:** Scanned actual chips and programmed mesh repair system.
- **Version control:** Maintained system for between teams collaboration.

Mathematics Teacher

Harmony School of Fine Art

2012 - 2013

Houston, Texas

- **Management, Communication:** Turned around failing 8th grade class.
- **LaTeX:** Created interactive Latex guide to algebra for students.

Mathematics Department Head

University of Shanghai

2007 - 2009

Shanghai, China

- **Management:** Organized teaching curriculum for three teachers
- **Calculus:** Taught Calculus I and II in an English immersion environment.

SKILLS

Programming

Python
C++
Scala

Regression

ElasticNetCV
Statsmodels
Logistic

Clustering

DBSCAN
KNN
Spectral

NLP

Data-mining
TF-IDF

Machine Learning

Keras
TensorFlow
PyTorch

Data Processing

SQL
EDA
Imputation

Visualization

Matplotlib
Tableau
Networkx

Cloud

AWS
Docker

EDUCATION

MFA: English

Temple University

Sept 2010 - June 2012

- **GPA:** 3.65

B.Sc. Mathematics

Rhode Island College

Sept 1999 - June 2003

- **GPA:** 3.19

ACHIEVEMENTS



Elected to School Committee

Used k-mean clustering to organize 2017 campaign canvassing.



Automated Farming

Using Arduino sensors, built 2 acre organic, blueberry farm.